Clinical Lecture
ON
AMPUTATION AT THE HIP-JOINT FOR ENCEPHALOID TUMOUR OF THE FEMUR.

Delivered at University College Hospital,

BY JOHN E. ERICHSEN, ESQ., F.R.C.S.,
PROFESSOR OF SURGERY AND CLINICAL SURGERY AT UNIVERSITY COLLEGE, AND SURGEON TO THE HOSPITAL.

GENTLEMEN,—Amputation at the hip-joint is one of those operations which, from the comparative rarity of its performance, and from the magnitude of the parts concerned, necessarily becomes a source of more than usual interest to the practical surgeon. Since the establishment of this hospital thirty years ago, only two cases have occurred in which it became necessary to resort to this procedure; and as both these cases have happened to fall under my care, I wish to direct your attention to some points connected with them and with the operation generally.

The first case occurred on March 31st, 1855. It was that of a man twenty-nine years of age, who had the right thigh badly crushed as high as the upper part of the middle third by some loaded trucks having run over it on a railway. I amputated the limb at the hip-joint, about two hours after his admission into hospital, by antero-posterior flaps. Five or six vessels were tied in the posterior and three in the anterior flap. Very little blood was lost, but the shock of the severe injury and operation combined was too much for his constitutional powers, and he sank a few hours after the operation.

This case presented no point of special interest. It adds but one more to that already long list of deaths following what is perhaps the most fatal of all the great operations in surgery—viz., *primary* amputation at the hip-joint for extensive comminutions of the femur, with crush of the thigh above its middle third. But fatal as this operation undoubtedly has been,—I believe I am correct in saying, hitherto invariably so *in the adult*,—the surgeon has no alternative in certain cases but to practise it. With the muscles of the thigh torn to shreds, the large vessels ruptured, and the bone splintered into fragments as high as the trochanters, an agonizing death is speedy and inevitable, and the only hope of ease and the sole chance of life, slender as that may be, lie in the removal of the mangled member, and the substitution of the clean cut of an amputation wound for the disorganized mass into which the limb has been converted.

The second case, and that to which I wish more particularly to draw your attention, has recently occurred. The following is the history as taken by Mr. Nunneley, my house-surgeon:—

Robt. W——, aged twenty-seven, clerk in a solicitor's office, admitted Dec. 9th, 1865.

History.—About four months ago the patient suffered with pain in his right thigh, which was worse at night, and increased on movement. A month afterwards the pain was so severe that he applied to a medical man for advice, who called his attention for the first time to a tumour in the middle of the thigh. This tumour, the patient says, has since slightly increased in size. Patient does not think that his health is much impaired. He says that he suffers occasionally with starting pains in the limb. There is no history of constitutional syphilis, nor of any injury to the thigh.

The tumour.—In the middle and upper thirds of the right thigh there is a hard, immovable, somewhat spindle-shaped tumour, most prominent on the anterior and inner aspects of the limb. At its highest point it seems to reach within 4¼ in. of Poupart's ligament; it is 7 in. long, and the circumference of the limb over its most prominent part is 17¼ in. In front the tumour is evidently covered by the muscles; behind and to the outer side there is hardness and enlargement more deeply seated. The femoral artery, which is pushed considerably inwards, lies in a kind of sulcus, superficial to the tumour. An exploring needle was thrust into the tumour; the groove contained some serous, bloody fluid. There is tenderness on deep pressure over the tumour. The patient is thin, and his complexion is pale and sallow.

Dec. 18th.—Patient's general health has improved since admission. The feeling of deep fluctuation in the tumour is not so distinct as it was a few days ago.

26th.—The tumour has increased slightly in size since the last report, its tenderness remaining about the same. The bandage was adjusted as usual this morning, and the patient commenced getting out of bed to put on his socks, lifting his legs to sit on the edge of the bed. Whilst doing so he called out loudly, and the dresser at the next bed heard a crack. The patient was lifted into bed. The right thigh appeared bent about its middle; the limb was shortened to the extent of half an inch, and the foot was slightly everted; on rotation indistinct crepitus was felt. The patient complained of great pain. The limb was put on the long splint.

27th.—The patient slept little during the night. The tumour is very hot, but the foot is cold. Patient is in great pain, but his spirits are pretty good.

29th.—Patient slept well last night. At eleven in the morning he had some beef-tea and brandy.

Previous to the administration of chloroform the long splint was removed and the limb firmly bandaged. While taking chloroform the patient struggled a good deal, and crepitus between the fragments of bone was often heard. From the ward the patient was taken to the theatre, and was fastened to the operating table (which had been raised at its lower end about two inches by a block of wood) by a band passing round the pelvis and another along the perineum.

Operation.—Mr. Lister arranged his clamp so as to compress the aorta. Mr. Erichsen, standing between the patient's legs, made the usual incisions for amputation at the hip-joint, cutting a rather short anterior flap on account of the extent of the tumour upwards. Mr. Thompson held this flap. Some little difficulty was experienced in turning out the head of the femur from the acetabulum, on account of the fracture greatly shortening the lever which the bone otherwise forms; and it had to be dissected out of the socket by the point of the knife. The hæmorrhage during the whole operation was very slight, owing to the perfect compression of the aortic clamp. Twenty-three vessels were ligatured, and the flaps were brought together by six points of silver-wire suture and some strips of plaster. Some water-dressing was put on the face of the stump, and the whole supported by a broad bandage.

The chloroform was given by Mr. Clover.

About an hour after the operation the patient was sick. About three hours after the pulse was 120, tolerably full. At ten o'clock twenty-five minims of tincture of opium were given, and the patient slept for two hours. He had ice, brandy, and beef-tea at intervals during the night.

Dec. 31st.—Patient slept during the night. The tongue is coated with some white fur; pulse 128, quick, frequent, and full. The plasters were removed, and the stump washed with some diluted Condy's fluid. There was some pus in the discharge. Fresh dressings were applied.

Jan. 1st, 1866.—Pulse 112, quicter; tongue nearly clean. Patient slept well, and is free from pain. The sutures were all untwisted; there was little tension on any of them. Patient had some minced meat for dinner. Diet: Beef-tea, milk, eggs, two ounces of brandy, and four ounces of sherry.

2nd.—The sutures were removed. Patient's bowels were freely opened by an enema. He has twenty-five minims of sedative solution of opium at bedtime.

3rd.—The skin and also the conjunctivæ have a decided yellow tint.

5th.—Patient sleeps well, is in good spirits, and free from pain. Diet: Meat, eggs, &c.

6th.—Four or five ligatures came away this morning; the flaps are uniting rapidly at both ends; the discharge is free and healthy. The yellow tint of the skin and conjunctivæ has almost disappeared.

8th.—The patient's general health is very good, and the stump is progressing most favourably. As the pulsation of the femoral artery was seen very distinctly through the column of pus, Carte's compressor was placed over the vessel as it crosses Poupart's ligament, so as to control, but not stop, the flow of blood into the flap.

9th.—The pulsation of the femoral ligature has quite ceased, even when the compressor is loose.

11th.—The stump has united throughout, except where the two bundles of ligatures come out. A dresser sat up with the patient for two or three nights about this time, in case secondary hæmorrhage should occur.

14th.—The femoral ligature came away this morning (six-

teenth day); besides the whipcord there was only the small part of the length of the vessel included in the noose. The shape of the stump is very good.

22nd.—Since the last note the patient has slept without a draught at night, and his general health has been very good. The stump has cicatrized for a great part of its extent; the quantity of discharge is small, and comes along the track previously formed by the ligatures. Since the operation there has been no unfavourable general or local symptom whatever.

The tumour was carefully examined by Mr. A. Bruce, to whom I am indebted for the following description of it, and drawings of its structure:—A longitudinal section having been made from before backwards, through the femur and the tumour, the latter was found to be firmly adherent to the periosteum and the shaft of the bone, appearing, indeed, as if it had originally sprung from the periosteal structure. It occupies the greater part of the middle and the lower portion of the upper third of the thigh-bone, presenting a somewhat regular fusiform outline, and the following measurements:—Length of section, seven inches and a half; greatest circumference in a spot a little below the seat of fracture, ten inches and a half. (Fig. 1.) It is enclosed in a firm, fibrous capsule, is remarkably well-defined, and is firm and somewhat elastic to the feel. At the anterior and lower part the substance is much firmer than at the posterior and upper, where it readily breaks down, and where, from the red discoloration, it is evident that hæmorrhage took place at the time of the spontaneous fracture. It appears also to have been considerably lacerated by the sharp end of the lower fragment of the shaft. (Fig. 2.)

FIG. 1.

FIG. 2.

The fracture is oblique from above downwards and backwards, and is situated between the upper and middle thirds at the point where the bone is most affected. The bone at the two extremities of the tumour appears to be quite natural, but for about one inch on either side of the line of fracture it presents certain changes, the colour being of a dull purplish-grey hue, and the Haversian canals being larger than natural, and full of a reddish pulp.

On removing a portion of the periosteum the surface of the bone is found to be very rough, irregular, and has evidently undergone absorption to a considerable extent. The medulla presents considerable changes, being of a dull-red colour for a distance equal to that occupied by the tumour, and ending below in a very defined border corresponding to the lower edge of the tumour, and above very abruptly in the cancellous structure of the upper part of the femur. The medulla of the ends of the bone appears quite healthy.

Microscopical examination by MR. ALEX. BRUCE.—A scraping from the tumour on the outer side presents a multitude of granular and nucleated cells, some spheroidal, others elongated or caudate. Numerous free nuclei crowd the field, and are rendered very distinct by the addition of acetic acid. (Fig. 3.)

On teazing out a portion of the tissue, the cells are found to be intimately adherent to the sarcolemma of the muscular fibres, of which the bulk of this portion of the tumour consists. They are also freely distributed amongst the bundles of areolar tissue.

FIG. 3.

FIG. 4.

(Fig. 4.) On making a section with a Valentin's knife, the appearance presented in Fig. 5 was obtained. The fibres of

FIG. 5.

the muscle here are seen in some places to be separated by an interval crowded with nuclei and cells interspersed amongst very fine stroma. The sheaths of the fibres are in some parts so thickly strewn with them as to render it impossible to see the stroma. In some portions there appears to be an immense increase in numbers and size of the connective-tissue corpuscles, amongst which are numerous nuclei similar to those of the cancer cells.

On examining a section through the periosteum taken from the bone at the upper margin of the tumour, the layers of fibrous tissue are found to contain numerous large elongated nuclei with a few spheroidal or caudate cells containing granular contents, and in some cases a nucleus or nucleoli. (Fig. 6.)

FIG. 6.

The periosteum taken from the healthy extremity of the bone exhibited but few connective-tissue corpuscles of normal size, and no granular cells.

Bone.—A small portion of the bone from the immediate neighbourhood of the fracture, after macerating in a weak solution of chromic acid, and subsequently in dilute hydrochloric acid, presents on section the following appearances. The Haversian canals are large, and absorption of their osseous walls had evidently been rapidly taking place, their outline being very irregular and jagged. The canals are found to be full of nuclei of considerable size, closely resembling the free nuclei found in the tumour. The lacunæ and canaliculi appear to be normal. (Fig. 7.)

FIG. 7.

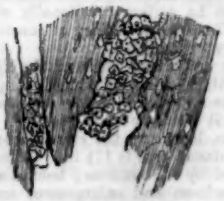


FIG. 8.

FIG. 9.

The *medulla* from the part affected presents a very different appearance from that of normal medulla. It appears to consist chiefly of minute granules of oleine dispersed amongst granular nuclei and nucleated cells (Fig. 8); and here and there are elongated cells. None of the large fat-cells, as obtained from the healthy extremity of the shaft, could be here seen. (Fig. 9.)

The change is quite sudden at the line of demarcation between the healthy and the diseased parts. The healthy parts are quite free from nuclei.

From this examination it would appear that the tumour is encephaloid—that it springs apparently from the periosteum; the affection of the bone being secondary, and not of very long duration. There is considerable infiltration in the muscles of the upper and middle parts of the thigh.

There are two or three points of very considerable practical importance connected with the operation itself, to which I wish to draw your special attention.

The first is as to the making of the flaps. This was done in the usual way, by transfixing the fore part of the thigh, and cutting upwards and forwards. Owing to the tumour rising high and implicating the bones up to the inter-trochanteric line, it was necessary, in cutting this flap, to incline the point of the knife downwards, so as to take it from the outer rather than from the inner part of the thigh. I had at first intended to have cut it from without inwards, as I feared there might scarcely be sufficient space between Poupart's ligament and the upper end of the tumour to make it in the more usual way; but by the adoption of the plan mentioned a sufficiency of healthy tissue was obtained to form an excellent flap. The posterior one was cut rather longer than usual to compensate for any unavoidable deficiency in length of the anterior one.

In amputating at the hip-joint the duties of the assistants are especially important; and in the second stage of the operation—that of disarticulation—the surgeon is greatly aided by the assistant who has charge of the limb abducting it and pressing it forcibly backwards, so as to throw the head of the bone against the anterior part of the capsule, through which it at once starts on that membrane being opened, either as the knife is thrust across the limb or as its point is applied to the capsule. In consequence of the femur having been spontaneously fractured before the operation, Mr. Berkeley Hill, who kindly took charge of the limb, was unable to execute this lever-like movement, the bone bending at the seat of fracture, and the head not being influenced by the abduction and depression of the shaft. I was therefore compelled to act as in a case of compound fracture high up, and to dissect out the head of the femur by a few touches of the point of the knife, seizing the bone with my left hand round the trochanters and pulling it forwards, so as to get the knife behind it in order to fashion the posterior flap.

The occurrence of profuse hæmorrhage during the operation was formerly much dreaded in amputations at the hip-joint. The bleeding from the anterior flap was usually readily enough controlled by a trusty assistant following the cut of the surgeon's knife, and seizing, as you saw Mr. Thompson do, the mass of soft parts in his hands, and then at once and efficiently compressing the femoral artery and its branches. There was more danger of serious hæmorrhage from the posterior flap inasmuch as the vessels in it—branches of the internal iliac—could not be compressed before being cut, and the bleeding from them could only be arrested by immediately pressing upon them when the limb was removed by means of the fingers of assistants or dry sponges.

But all this dread of hæmorrhage in this operation, and I may say in all others in the lower half of the body, is now removed by the use of that admirable instrument, Prof. Lister's aorta compressor. Prof. Lister, of Glasgow, of whom we are justly proud as an old student of this College, and who was formerly one of my house-surgeons, happened to be here at the time of the operation, and most kindly superintended the application of his own instrument. This he did so effectually that not an ounce of blood was lost from the flaps; the femoral artery, cut long, with an open mouth as empty as it would be in the dissecting-room, giving no trouble, and neither it nor the arteries in the posterior flap yielding a drop of blood. The advantage of all this to surgeon and to patient cannot be overestimated. The surgeon has no anxiety on the score of hæmorrhage, and need be in no undue hurry in securing the cut arteries. The patient loses no systemic blood, and thus has his strength husbanded for the after-progress of his case, and incurs a proportionately diminished risk of those low diseases by the supervention of which undue loss of blood during operations is so frequently fatal. I believe Lister's abdominal compressor was first employed by an old and distinguished pupil of this College, Mr. Gamgee, in a remarkable case of amputation at the hip-joint performed by him at Birmingham.

The only blood lost was the regurgitant flow from the tumour and limb; but this was materially lessened by taking the precaution before the operation to bandage and elevate the limb, so as to empty the veins as far as practicable.

The after-progress of the case presented several points of interest. The first and most striking was the total freedom from all pain and all evidence of shock after the operation. The pulse rose to about 140, and kept high, up to 120 for many days; but the patient was cheerful, and did all to assist his recovery by his fortitude and great spirits. The suppuration from the stump was free; the pus apparently coming from the acetabulum, the cavity of which must necessarily be closed in by granulations. Hence primary union is not to be looked for after amputations at the hip-joint.

The only condition connected with the patient that gave us any anxiety was the free pulsation in the femoral artery, which continued up to the twelfth day. Fearing that there was an insufficient coagulum, as the beat of the artery was very forcible and free down to its very terminations, and that secondary hæmorrhage might come on when the ligature separated, I put Carte's elastic compressor on the common femoral as it passes over the pubes, and kept it applied for forty-eight hours. The effect of this was not only to quiet the pulsations in the stump, but to tranquillize the whole of the arterial system, relieving the force, the frequency, and the irritability of the pulse.

Although the wound is now almost completely healed, there is still some suppuration in the deeper part, apparently coming from the acetabulum.

The most unfavourable point in this case is not only the malignant character of the tumour, as evidenced on examination after removal, but its periosteal origin led to a widespread infiltration of those muscles that were inserted into that portion of the femur affected by the disease. Had the tumour originated in the interior of the bone, and pushed the periosteum with the muscular attachments away and before it, there would have been less risk of recurrence than I fear at present exists, in consequence of the more superficial situation of the primary development of the tumour.

I have little to say about the general result of these amputations; but that little is favourable. Statistics incontestably prove that since the introduction of anæsthetics the per-centage of recoveries after amputation at the hip-joint has materially increased. This is what we might *à priori* have expected in an operation of so severe a character that the shock of its performance might of itself be sufficient to destroy life. Whatever lessens that shock must proportionately tend to the preservation of the patient. But though the mortality has materially lessened after disarticulation at the hip-joint of late years, this diminution of fatality is confined to certain classes of cases, and does not extend uniformly over all for which the operation is practised. It is especially after the amputation of thigh-stumps, and the removal of the whole limb for tumour of the femur, that a more successful result has been obtained of late years. The amputation at the hip-joint for injury of the thigh still preserves its high rate of mortality, uninfluenced apparently by the employment of anæsthetics. It would appear as if in these cases the double shock of the injury and the dismemberment was too great for the endurance of the patient.

SUICIDES.—The following curious analysis is given by Dr. de Boismont, who has made it his specialty to study the suicides which have taken place in the French Empire between the years 1827 and 1860:—

	Total.	Men.	Women.
By hanging	14,806	12,152	2000
By drowning	11,845	6568	2117
By firearms	4390	4337	53
By sharp weapons...	1552	1272	230
By voluntary falls...	1800	862	518
By poison	756	474	282
By sundry means ...	282	228	54

THE CONDITION OF THE PRACTITIONERS IN CORSICA.—The Medical Society of Corsica has just been annexed to the General Association of France. The Emperor has contributed £8, his physician, Dr. Conneau, £4, and an anonymous donor £8, which sums are intended to pay the annual subscriptions (10*s.*) of some practitioners in rural localities, whose income is so limited that they find it difficult to discharge this small contribution.

ON THE DISCOVERY OF TRICHINA.

BY T. SPENCER COBBOLD, M.D., F.R.S.,
LECTURER AT THE MIDDLESEX HOSPITAL.

To many minds it might almost appear a work of supererogation to offer an original communication on this subject; but the wide-spread interest created by recent outbreaks of the fleshworm disease, together with the evident confusion existing in this relation, render it desirable that all of us should possess clear and definite ideas regarding the true sources whence our knowledge of the parasite has been derived. When recently a writer in an ably-conducted paper, the *Pall-mall Gazette*, put forth a statement to the effect that the history of Trichina and Trichiniasis was "not yet clearly made out," and further, that "extensive series of experiments had led to no definite result," I felt it my duty to correct this misapprehension by addressing a letter to the editor of *The Times*. As I referred the general reader to the best authors I hoped the matter would drop; but Mr. Jabez Hogg wrote a reply, or rather supplemented my statement by pointing to Professor Owen as the discoverer of trichina. This brought another reply, in the shape of a lengthened letter from "the Curator of Guy's Museum," who claims for Mr. Hilton the credit of the discovery of trichina. To this again I replied, "*If* Mr. Hogg is in error respecting the discovery of trichina, so also is the curator of Guy's museum." The "little bodies" were first noticed by Tiedemann in the year 1822, thus anticipating Mr. Peacock (whose name had been incidentally mentioned) by six years. I referred the curator (Dr. Wilks) to the first volume of Frorieps' "Notizen," the title-page of which bears the date of 1822; but, in point of fact, the date of publication of the notice in question was August, 1821. In this brief note I expressed my own individual convictions, but my fixing of the discovery of trichina was entirely conditional. To put the matter in plainer terms, what I meant was really this: "*If* the curator of Guy's museum be justified in contradicting Mr. Hogg's assertion, that Owen was the discoverer of trichina, I may, with almost equal right, contradict the curator, and point to Tiedemann as the discoverer." This position I still maintain. My statement in Tiedemann's favour was entirely conditional. In the curator's anxiety to assert due credit for his distinguished colleague, Mr. Hilton, he willingly overlooked the monosyllable with which my asseveration commenced.

Dr. Wilks, in another and final letter, calls upon me "to communicate to the medical journals" my reasons for fixing "the merit of the discovery of this remarkable disease upon foreigners." That request I cannot comply with; nevertheless, with the consent of the Editors of THE LANCET, I am prepared to state the grounds on which I, individually, entertain the belief that Tiedemann was the first anatomist who encountered those calcified or degenerated little cysts, which we now know to be the so-called trichina capsules. Happily the discovery of the actual "fleshworm" itself will continue to be imperishably associated with the distinguished names of Owen, Paget, and Wormald, whilst the scarcely less important discovery of the lemon-shaped and calcified capsules must permit a similar bracketing of the names of Hilton, Peacock, and Hodgkin. The merit of priority of discovery is gradational both in degree and in kind, but in order to establish the relative degrees of priority involved, it is necessary to display an accuracy of philological criticism to which, perhaps, I may not be equal. As to the main facts themselves I think the following are decisive:—

So far as regards the parasite itself, it must be apparent to all who have perused the standard treatises and monographs of Küchenmeister, Leuckart, Davaine, and Pagenstecher, that there has been no indisposition on the part of continental writers to render to our countrymen their legitimate meed of praise; whilst, at home, naturalised foreigners, such as Drs. Thudichum and Althaus, have honourably followed in the same track. All these authors' works I have now before me; their several historical records being substantially the same. In my own treatise on "Entozoa" I purposely avoided giving a lengthened account of the history of trichina, because, as I there stated, "the circumstances attending the discovery of this parasite" were "so familiar to the English reader" as to render it unnecessary.

However, the curator of Guy's museum accuses me of "attempting to take from our countrymen the merit of the discovery of the trichinous disease." Such an intention was far from my thoughts; and if "the Curator" will turn to p. 335 of my work he will find a passage in which, alluding to Owen's observations, I have remarked as follows:—"To my mind this discovery is one of the happiest to which Englishmen can point."

But "the Curator" goes a step further, and is barely polite. He does not appear to have read the paragraph of Tiedemann in Frorieps' "Notizen" (for August, 1821), but quotes Leuckart as finally disposing of the question as to whether Tiedemann's "concretions" are trichina capsules or not. He then triumphantly adds the following warmly expressed passage:—"On such a flimsy foundation as this the credit of prior discovery might be taken by fifty German writers." This is rather sharp. With all the best German historical records of the trichina discovery in my possession, I am quite at a loss to understand to what "writers" the Guy's "Curator" refers. But, without wasting words, let us examine the passage which seems to Henle and myself to describe, somewhat rudely perhaps, a genuine case of trichina. The so-called "flimsy foundation" stands as follows:—

"Tiedemann fand bei der Leichenoffnung eines Mannes, der ein starker Branntwein-trinker gewesen, und nach mehreren heftigen Gichtanfällen an Brustwassersucht gestorben war, in den meisten Muskeln, vorzüglich an der Extremitaten weisse steinige Konkremente. Sie lagen zwischen den Faserbündeln im Zellgewebe; haufig auch an den Wänden der Arterien waren zwei bis vier Linien lang und rundlich. Die chemische Untersuchung welche Gmelin veranstaltete zeigte darin 73 Theile phosphosauren Kalk, 7 Theile kohlenstoffsauren Kalk, und 20 Theile einer thierischen, dem Eiweiss oder Fibrin ähnlichen Materie."

This passage I translate as follows:—"At the post-mortem examination of a man who had been a great brandy-drinker, and who died from thoracic dropsy after several severe attacks of gout, Tiedemann found white stony concretions in most of the muscles, especially at the extremities. They lay in the cellular tissue between the fibre-bundles; frequently also attached to (or near) the walls of the arteries, being from two to four lines long, and roundish. The chemical examination conducted by Gmelin yielded seventy-three parts phosphate of lime, seven parts carbonate of lime, and twenty parts animal matter, resembling albumen or fibrin."

Now, in regard to this passage, "the Curator" correctly states that Leuckart denies that we have here to deal with trichina. In this particular opinion Leuckart stands almost alone—I mean amongst recognised helminthologists who have honestly investigated the matter and have conducted trichina experiments. I am sure neither Pagenstecher nor myself, who are on terms of personal friendship with Leuckart, would willingly detract one iota from his authority; but I hold that we are both entitled (as original and, for many years past, laborious workers in the field of helminthology) to express an opinion, in accordance with our convictions. Pagenstecher, referring to the views entertained by "our mutual friend," remarks: "Leuckart hat irrthümlich dieses Citat fur falsch erklärt."* Henle appears to have been the first to have pointed to the passage of Tiedemann as describing an example of trichina; and in this reference he has been followed by Diesing, Küchenmeister, Davaine, and Thudichum. But I am under the impression that only Henle, Leuckart, and Pagenstecher examined the original passage for themselves before they placed their references on record. Anyhow, I am at a loss to perceive the "flimsiness" of the foundation on which Henle and myself have independently framed our convictions.

I freely admit that the evidence is unsatisfactory; moreover, it would hardly be fair to assume that Pagenstecher dissents from Leuckart's view of the question of priority. To put the matter correctly, however, it is necessary to state precisely what he says. Speaking of Tiedemann's notice, he writes ("Die Trichinen," s. 4):—

"This communication was also referred by Henle to such a development when he subsequently found trichinæ; and in this sense it was afterwards received by Diesing, Küchenmeister, and Davaine. But it has been rejected by Leuckart on account of the size (from two to four lines) and seat of the concretions.

* See foot-note to p. 4 in his recent work "Die Trichinen." Leipsig, 1865. This beautiful memoir contains a report of experiments performed at the Zoological Institute of Heidelberg, by Professors C. J. Fuchs and H. A. Pagenstecher, by order of the Baden Grand-ducal Board of Trade.

True, it has never yet been observed that the capsuled trichinæ (not measuring a tenth part of that diameter) subsequently constituted centres of gouty deposit exceeding their own bulk; nor is it likely that they should. Seeing, however, as we often do, that errors respecting size have crept into works on trichina, we shall not need to lay much stress upon these statements; still less so since the notice is very superficial and its character is essentially of a physiologico-chemical nature. But this, at least, seems to us decisive, that when Bischoff, at Heidelberg, wrote on a case which occurred in Heidelberg, not one single word was mentioned respecting a former case, if such should have happened, although Tiedemann and himself were on terms of close intimacy. Our hope to be able to produce a further decision by the examination of the preparation preserved in our anatomical collection has been disappointed; nothing of the kind could be found."

From this extract it seems that my view does not gain Pagenstecher's entire support; although, in a foot-note, he remarks that Leuckart has erroneously declared Henle's quotation to be false. Leuckart, perhaps, only referred to the source of the notice. Pagenstecher further goes on to discuss Klencke's claims to the discovery of trichinæ. He says:—

"Klencke has asserted that he had already drawn trichinæ in the year 1829, and that he had seen them again in 1831. This subsequent statement has no kind of confirmation. The unreliableness, mistakes, and self-deceptions in the helminthological writings of Klencke have repeatedly been exposed some twenty years ago."

Possibly, Klencke may be one of the *fifty* German writers referred to by Dr. Wilks; if so, it must be refreshing to "the Curator" to see Klencke's claims so completely disposed of. Nevertheless, I cannot bring myself to assert that Tiedemann's notice does not describe trichina-capsules. The real difficulty is the size there given. With me, this goes for next to nothing; for, as Pagenstecher himself has pointed out, similar errors have been made by able writers. Thus Virchow erroneously described intestinal trichinæ to be four lines in length; whilst, on the other hand, Vogel spoke of free trichinæ as one-hundredth of an inch long—"the former statement being just as much too exaggerated as the latter is too small." Whatever be the true state of the case, I should like to be able to say with Pagenstecher, "Es darf also wohl unbedingt Hilton als der Entdecker der trichinen gelten." I will admit that a legitimate doubt hangs over the claims of Tiedemann, whilst no doubt can be entertained that Hilton was the first to ascribe to these bodies an animal nature.

When it is asked, Who discovered trichina? we must frame our reply according as to whether the inquirer refers to the worm itself, the disease which it superinduces, or the pathological appearances which its presence occasions. Summarily, my ideas on this head may be categorically expressed as follows:—

1. Professor Owen first described and named the flesh-worm (*Trichina spiralis*). He first interpreted the true nematoid nature of the parasite. From a zoological point of view, he is the discoverer of trichina.

2. Mr. Paget, according to the testimony of Owen, "at the same time satisfactorily determined the existence of the entozoon, with the assistance of Mr. Brown and Mr. John Bennett, at the British Museum." Probably, they actually saw the worm before Owen. The Professor's candid statement not having been repeated in the subsequently written article "Entozoa" in Todd's Cyclopædia, has called forth the remark by Pagenstecher (*loc. cit.*, p. 6), "Hier nennt sich Owen als Entdecker und verschweigt Paget ganz."*

3. Mr. Wormald had "more than once" previously noticed the characteristic specks "in subjects dissected at St. Bartholomew's" Hospital. He transmitted the individual specimens by which Owen made the discovery.

4. Mr. Hilton was the first to suggest the parasitic and animal nature of the specks observed in human muscle. He anticipated Wormald in his observation of the "gritty" particles in dissecting-room subjects, and described the bodies as "probably depending upon the formation of very small cysticerci."

5. According to Dr. Hodgkin, "the first observation of these little bodies was made in 1828" by Mr. H. Peacock. The latter made a dried preparation of the *sterno-hyoideus* muscle to display the specks. That preparation is the oldest in existence, and may be seen in Guy's museum.

6. Henle, Diesing, Küchenmeister, Davaine, and Thudichum have pointed to a notice by Tiedemann as probably, or possibly, indicating a prior observation of the specks. Leuckart rejects the evidence. Pagenstecher appears to be in doubt as to the nature of the bodies in question. I entertain a persuasion that they were calcified trichina-capsules.

7. Herbst was the first to rear muscle-fleshworms, or encapsuled trichinæ in animals by experiment (1850); and Virchow was probably the first to rear and recognise sexually mature intestinal trichinæ by experimenting upon a dog. (Deutsche Klinik, 1859, s. 430.)

8. Leuckart was the first to offer a full and correct solution as to the source and mode of genesis of the fleshworm (1860). He disproved the erroneous views of Küchenmeister.

9. Zenker opened up a new epoch in the history of trichinal discoveries. He first observed the young in the act of migration, and was the first to demonstrate that these parasites were capable of giving rise to a violent disease in the human body.

If any one of the above conclusions can be shown to be incorrect I shall be happy to abandon it. Meanwhile, I hold Owen to be the discoverer of trichina. Paget, it seems, first saw the worm. Wormald transmitted the specimens to Owen, having seen similar bodies previously. Hilton met with cases before Wormald, and first suggested the animal nature of the specks. Peacock anticipated Hilton in noticing the specks. Tiedemann may possibly have anticipated Peacock.

Wimpole-street, Feb. 1866.

* Although *published* records do not permit me to assert Mr. Paget's claim to priority more cogently, yet I may, perhaps, be allowed to say that I have never entertained a doubt that he first ascertained the existence of the worm. I have, indeed, been assured that Mr. Paget communicated this discovery to the Abernethian Society, at St. Bartholomew's Hospital, before Professor Owen's paper was read at the Zoological Society. Be that as it may, helminthologists can only deal with the facts as they have been made public. The present office-bearers of the Abernethian Society may, even at this late period, think it worth their while to make more fully known some of the "missing links" in the chain of evidence. This is a point on which the Society must decide for itself. Meanwhile, it is perfectly clear that Mr. Paget was contented with the honourable mention made of his name in Owen's paper.

INTERESTING CASES.

BY WILLIAM MARTIN COATES, M.R.C.S.,
SURGEON TO THE SALISBURY INFIRMARY.

Spina Bifida, treated by Injection of a Solution of Iodine and Iodide of Potassium; Cure.

ROSA M. L—— was born on October 3rd, 1859. I attended the mother in her confinement. The labour was natural. I noticed the spina bifida immediately the child was expelled. The mother is delicate, the father robust.

The tumour, the size of a large walnut, transparent and flaccid, was situated at the lower part of the last lumbar vertebra and the upper part of the sacrum. The opening into the spinal column was about half an inch long and a quarter wide. It was easily felt. The child was otherwise well formed and healthy. There was no paralysis of the lower extremities. When the child cried or struggled the tumour became very tense. I gave a desponding prognosis. The tumour progressively enlarged, becoming daily less flaccid when at rest, and more tense during exertion or crying.

About a month after the birth of the child, I read, in an extract from the *Boston Medical Journal*, that "two American physicians, Drs. Brainard and Crawford, had treated seven cases of spina bifida by iodine injections, and that five were cured, one dying seven months afterwards of chronic hydrocephalus. They used from a quarter of a grain to four grains of iodine, and from three-quarters of a grain to twelve grains of iodide of potassium, dissolved in from one drachm to several ounces of water. The injections were repeated as often as necessary, the strength of the solution being gradually increased. The punctures were made in sound skin at the side of the tumour. No more of the fluid was withdrawn than was replaced by the injected solution. After the operation collodion was applied, and for months after the tumour had disappeared."

I proposed to operate on Rosa L——. A consultation with Mr. James Paget was decided on. He entirely coincided with me in recommending the operation, as without it the case was hopeless. The infant, on its return to Salisbury, caught whooping-cough; in consequence of which the operation had to be put off.

On the 8th of January, 1860, the tumour was so tense, and the covering had become so thin at one point, that I deter-

mined to lose no more time. I operated in the following manner, chloroform being very cautiously administered by my partner, Dr. Blackmore:—Instead of an ordinary trocar, I used Wood's syringe, holding half a drachm, with a pointed perforated needle. Having screwed on the needle, and pressed home the piston, I thrust the needle through a healthy part of the skin at the side of the tumour into its cavity, drew out, by withdrawing the piston, half a drachm of clear fluid, unscrewed the needle, and emptied the syringe; pressed the piston home, screwed it on again, and again withdrew half a drachm of fluid, and so on until I had taken out two drachms. The tumour was then very flaccid. I injected, by reversing the process, two drachms of the following fluid:—Of iodine, ten grains; of iodide of potassium, twenty grains; of distilled water, one ounce. The tumour was painted over at once, and daily afterwards, with contractile collodion. The thumbs of the patient were immediately convulsively drawn into the palms, and the toes of both feet pointed. The infant looked very ill, and refused the breast during twenty-four hours. She then rallied, took the breast, and from that hour had no unfavourable symptoms. At the time of the operation the covering of the tumour was so thin that the colour of the solution of iodine was very apparent through it.

From this time the cure proceeded uninterruptedly. The tumour became flatter, its covering grew first mottled by deposition of white matter in its substance, then evidently, though gradually, more dense, until when quiet it (the tumour) did not project more than an eighth of an inch from the surrounding skin, and all its covering, except about the size of a pea, became thick and opaque. The child is, and has been since two months after the operation, well, and runs about as vigorously as other children of her age.

As will be seen by the perusal of the above, the original idea did not emanate from me. The idea of curing spina bifida by the injection of a solution of iodine originated with Drs. Brainard and Crawford, American physicians. The modification of the operation I introduced was the using Wood's syringe and needle instead of the small trocar. By this my plan a very small puncture is made; there is much less chance of wounding nervous tissue; and so small a puncture, if care be taken, could not admit atmospheric air. The puncture healed immediately.

I used chloroform, not only to save the child pain, but to prevent shock, recollecting the experiments described by Dr. Claude Bernard, in which it was found impossible to destroy the spinal cord in frogs without killing the animals, until chloroform was given them, and then they survived the experiment.

The peculiar convulsive action bringing the thumbs into the palms, and causing pointing of the toes, is interesting, as being very similar to the effects of centric or eccentric irritation of the spine.

The case of Rosa M. L—— is strongly favourable to the view that spina bifida is essentially a local dropsy of the arachnoid membrane of the spinal cord, and that the fluid, carrying with it the membranes of the cord, either prevents ossification at the point of its exit, or causes absorption of the tender bony covering of the spine by continued and increasing pressure.

If this hypothesis be accepted, the alterative action of the iodine on the lining membrane of the cord is explained, and it would account for the failure of puncture, incision, or excision in these cases. By the injection the disease itself is attacked; by the simple puncture &c. the effect of the disease is attempted to be removed, but the diseased action is neither altered nor controlled, and danger is run of arachnitis of the cord.

I believe this is the first case related of the kind by a European operator. The injection of a strong solution of iodide of potassium and iodine into a sac communicating directly with the spinal cavity seems indeed a bold proceeding; but, according to my experience, there is a marvellous tolerance of iodine in the animal tissues. Besides, this disease seems otherwise beyond our art.

The iodine injection appears to do in these cases that which Nature does in rare instances. It arrests the abnormal secretion of serum. That being done, the covering of the tumour contracts and thickens, so as to protect the membranes of the spine at that point from external injury.

Another mode of radical cure by an effort of nature is by adhesion of the arachnoid at the opening in the spinal column; but it is evident that the abnormal and progressive secretion of serum must first have been arrested, otherwise death must have ensued by pressure on the spinal cord and brain. In such cases of isolation of the swelling, it may be as safely removed as an ordinary tumour, and this, I believe, has been done. It is, however, a hazardous proceeding, as with thickened integuments it is impossible to ascertain that there is not some slight communication with the membranes of the spinal cord, and then arachnitis of the cord is very probable.

Large Ranula; Injection of Compound Tincture of Iodine; Cure.

Ellen M——, a patient in Salisbury Infirmary, aged ten. Just below the base of the lower maxillary bone on the left side, extending from the angle nearly to the symphysis, there was a soft doughy swelling. At first sight and touch its nature was not apparent; but on making pressure (her mouth being open) on the tumour below, so as to force upwards the mucous membrane covering it between the tongue and jaw, it was seen and felt to be a large ranula.

June 11th, 1865.—I injected from within the mouth, by means of Wood's syringe, fifteen minims of compound tincture of iodine into the tumour. On withdrawing the needle, a drop of the fluid peculiar to ranulæ oozed from the puncture.

12th.—A little hardening of the swelling, but no pain.

21st.—Tumour rather smaller. On this day I injected thirty minims of the tincture from without by means of Wood's syringe.

22nd.—There is considerable hardening of the ranula, and some tenderness on handling it.

From the last note the tumour daily diminished, and on the 15th of July it could not be either seen or felt.

I cannot find by reference to those works of surgery in my possession that the cure of ranula has been attempted by the injection of iodine. I therefore have assumed that the idea is an original one of mine. It is so simple, so painless, so free from danger and annoyance, that I have ventured to place it among my interesting cases. It is true that one case is too small a basis on which to found a treatment; but as there must be a first case, and as ranula (according to my experience) is not a common affection, I publish it in the hope that others may give it a trial; and perhaps, in the future, those suffering from this disease may escape, through my means, incision, excision, the cautery, the seton, the opening it in its whole length and stuffing it with lint, or the platina tubes of Dupuytren,—all of which must result more or less in failure, pain, bleeding, or distressing salivation.

Glandular Tumour of Mamma, with Cysts; Injection with Compound Tincture of Iodine; Cure.

Miss ——, aged thirty-six, of a phthisical family, subject to hæmorrhoids, who was cured by me, in 1859, of a fissure of the anus by division of the sphincter, and who suffers from painful menstruation, consulted me, on the 11th of August, 1862, for a tumour of her left breast. This organ was much larger than the right, and was tender. The several portions of the gland of its left half were harder and of greater bulk than on its mesial side. In the centre of the affected portion, which measured two inches and a half in its diameters, there was to the touch a feeling of elasticity, giving an impression of deep-seated confined fluid. On introducing a grooved needle at the softest point a clear fluid escaped.

On the 13th of August I passed the perforated needle of Wood's syringe, with piston down, into the elastic part of the tumour, and by withdrawing it (the piston) as in the first case, removed five drachms of clear fluid, and threw in two drachms of compound tincture of iodine. Very little immediate pain was caused by this proceeding. On the 14th there was some little tenderness and increase of size. These effects soon subsided, and in the course of a month the mamma was not larger than the right, all hardness having disappeared.

On December 25th, 1864, I was consulted by the same lady for another cyst, situated directly below the nipple of the same breast, with the same increase of glandular structure around. I applied the same remedy, with the same happy result; and to-day (Dec. 19th, 1865) I carefully examined the part, and found it free from enlargement, hardness, tenderness, or abnormal elasticity. There occurs at each menstrual period a sensation of fulness and tenderness, subsiding as the period passes away.

The interesting points in the foregoing case are, the bloodlessness, simplicity, painlessness, and rapidity of cure of the cysts, when compared with removal of the tumour, or the laying it open and stuffing it with lint, the treatment recommended by the most eminent authorities. Secondly, the subsidence of the glandular hypertrophy a few weeks after each injection, leading to the inference that the iodine acts in this disease in the same manner as in cases of hydrocele, in which

I have frequently seen the enlargement of the testicle, so common in this disease, gradually subside after the treatment by injection of the tincture of iodine.

Wood's syringe enables us to treat cases in which iodine injections are useful in a much less painful manner than by the hydrocele trocar; and if the needle has a rather larger bore it forms an excellent mode of exploring for fluid, as, by withdrawing the piston, considerable traction is exerted upon the liquid contents of a tumour.

Salisbury, January, 1866.

A Mirror
OF THE PRACTICE OF
MEDICINE AND SURGERY
IN THE
HOSPITALS OF LONDON.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. GEORGE'S HOSPITAL.

A CASE OF DOUBLE PNEUMONIA TREATED BY BLEEDING, TARTAR EMETIC, AND CALOMEL; RECOVERY.

(Under the care of Dr. PAGE.)

THE main interest attaching to the following case depends upon the circumstance that it was successfully treated in accordance with a plan which is now often termed "old fashioned." In other respects there is nothing to call for particular notice. It was just such a case of uncomplicated double pneumonia as may be seen any day in any hospital. It has the merit, however, of having been carefully observed and recorded, and we are indebted to Dr. Reginald Thompson, medical registrar, for the details, of which those relating to the temperature at various stages are especially interesting and instructive. We would draw attention especially to the rapid decline in the rate of respirations and the great sensation of relief which followed the abstraction of blood. The occurrence of these was so rapid and well marked that they may safely be described as having been due to that proceeding; and however much the opinions of authorities may differ as to the necessity or not of an antiphlogistic treatment of pneumonia, the comfort experienced as a result of a small bleeding in the early stage is very generally recognised. The case before us seems to have been one in which no objection, to say the least, could well be offered to a moderate abstraction of blood.

William P——, aged twenty-four, a stableman, admitted on Jan. 13th, 1866. He had been grooming horses on the day of his illness (Jan. 10th) stripped to his shirt. In the evening, at six o'clock, he was seized with rigors, and went home. He sweated freely that night, and on the following morning was attacked with pain in the left breast, accompanied with headache and cough, the pain being very much aggravated by inspiration. On the 12th he began to spit a little with the cough, and towards night he became light-headed. He was a strong robust young man.

When admitted, he was much flushed and feverish; tongue with a brilliant yellow fur; he complained of pain in the head and body, and had a little cough. On examining the lungs, it was found that the lower two-thirds of the left was in a state of consolidation, as shown by the presence of dull percussion and tubular breathing, with increase of vocal fremitus over this region. The rest of the lung was involved, but had not reached the stage of consolidation. There was also a dry rubbing sound heard over the front part of this lung. The right lung was in the first stage of pneumonia to the extent of one-half, fine crepitations being heard over this locality. So that the lower half of the right lung and the upper third of the left were in the first stage, and the lower two-thirds of the left lung in the second stage of pneumonia. Respirations 52 in the minute; pulse 92. Temperature in the axilla 102° (F.) The sputa were scanty, with a yellow tinge from blood, rather gelatinous, but transparent. Urine scanty, high-coloured, and containing some quantity of albumen.

He was bled at forty-five minutes past two P.M., to the amount of eleven ounces and a half.

The following observations were made eighteen minutes after the operation:—The pulse was found to be 92, respirations 42, temperature 102·3°. The pulse was compressible, but more free, and not so hard. Sweating followed in a quarter of an hour, and the breathing became easier. He was ordered two grains of calomel, one-eighth of a grain of potassio-tartrate of antimony, and a quarter of a grain of opium, in a pill, every six hours; and broth diet. The pills were first given at SIX P.M.

Observations were again taken at a quarter to six. The pulse was not found to have been affected as regards its rapidity; it was beating 90 in the minute; the respirations were 36, and the temperature 102·2°. He felt that he could respire more deeply, and he said that the headache was relieved. There was, however, still a tendency to delirium when he closed his eyes, and he was slightly delirious during the night; nevertheless, some sleep was obtained.

He was examined again at half-past nine P.M. The pulse was 88, respirations 32, temperature 101·6°. The blood taken from the arm was sizy, and not well cupped or buffed.

On the 14th, observations were made at half-past nine A.M. The pulse was 104, respirations 44, temperature 102·8°. The crepitations had gone from the right side, and there were fewer crepitations on the left, with deeper respirations. Sputa increased in quantity, and blood-tinged; sweating profuse; bowels opened once. Slept well at night, and without any delirium.

15th.—Observations at ten A.M.: pulse 96, respirations 40, temperature 102·8°; breathing more even; no crepitation on right side, but the breathing was not quite restored; less tubular breathing over lower part of left lung. Observations at SIX P.M.: pulse 92, respirations 28, temperature 100°; passed an extremely good night.

16th.—Observations at eleven A.M.: pulse 72, respirations 28, temperature 100°; breathing easier; sputa still blood-tinged, but more watery, and not so abundant; gums just beginning to look a little spongy; bowels not open; free and deep-toned percussion all over the right lung; small rolling crepitations over the lower part of the left lung.

17th.—Slept well last night; pulse 72, respirations 28; temperature 98°; gums sore; urine full of lithates, but without albumen. The pill only at night.

19th.—The breathing was now nearly restored to the lungs, he slept well, and was evidently rapidly improving.

20th.—He was now allowed a mutton chop. The gums were not sore, though there was still some mercurial fetor.

22nd.—He got up to-day, and might be considered as convalescent. The pill was omitted.

He was examined carefully before he left the hospital, and no symptoms of his illness remained; the lungs were apparently sound. He went out on January 31st, having been ill twenty-one days; admitted on the fourth day of illness; sojourn in the hospital, eighteen days.

GUY'S HOSPITAL.

CHRONIC ULCER OF STOMACH; THICKENED AND CONTRACTED STATE OF COATS; PERSISTENT VOMITING; DEATH FROM EXHAUSTION; AUTOPSY; CLINICAL REMARKS.

(Under the care of Dr. GULL.)

IT will be noted in the following case that the patient was in hospital for eight days only before her death. She had suffered from vomiting, which became more and more frequent, for four months previous to her admission. It is impossible not to believe that had this poor woman received at an earlier stage of her illness the kind of attention and treatment which she obtained, too late, in the hospital, there was nothing in her case to have necessitated a fatal termination. But the importance in such cases of giving the stomach rest and nourishing the system by enemata is not as yet generally enough appreciated. It is far too common still for the medical attendant to try drug after drug in the hope (too often futile) of at last hitting upon one which will "stay the vomiting." Dr. Brinton's remarks upon this point in his exhaustive work, "Diseases of the Stomach," may be read with great advantage. "Practically," he writes, "I have long come to the conclusion, that where one or two of the above remedies (prussic acid, citrate of potash in effervescence, &c.) appear

to be inefficacious it is better not to risk irritating or exhausting the stomach by what are really new experiments.....Of course, if experience showed that they really did check vomiting it would be absurd to reject them for want of a full explanation of the way in which they produced this effect. But as it may be confidently asserted that they often fail to do any good, however carefully administered, and that the treatment which foregoes their use is far more successful, it is obviously important to consider how far that treatment is more rational than the plan it claims to surpass," &c.

For the following notes we are indebted to Mr. H. Denne, Dr. Gull's clinical clerk :—

Caroline D——, aged thirty-nine, admitted into Miriam ward Jan. 31st, 1866. She has been married three years, and during this time has had two miscarriages, and her menstruation has been irregular. Always enjoyed good health, with the exception of occasional pain in the stomach after her meals. On the 25th September, 1865, after her dinner, she was seized with rigors, and about an hour afterwards she vomited a white watery fluid. She was in no pain, but had a sensation of weight in the epigastrium. There was no constipation at this time. For two months after this she used to shiver every day after her dinner, until she vomited, about three hours afterwards. Then the vomiting became more frequent, and occurred an hour or two after every meal; a sensation of weight in the epigastrium being present before vomiting. For the last six weeks she has had a burning sensation at the epigastrium, between her shoulders, and down the spine, unrelieved by vomiting. For five weeks she has vomited after everything she has swallowed, the interval varying from a minute to an hour. For four months there has been great constipation of the bowels, and her urine has been scanty and high-coloured for the same period.

State on admission.—She appears rather emaciated. Her eyes are sunken, and have a dark areola around them. No increased deposit of pigment on the skin elsewhere. Nothing abnormal discovered in her chest by percussion and auscultation. Pulse 110, small and irregular; respirations 15. Tongue dry and red; fungiform papillæ very prominent. Her abdomen is flaccid, and retains the impress of the finger, but is not œdematous. Liver and spleen are not enlarged. There is a movable tumour, about two inches in diameter, a little to the left of the navel. The vomit consists of mucus; no blood-corpuscles seen by microscopical examination. Urine contains a trace of albumen, and on standing there is a copious deposit of pale pink lithates and crystals of uric acid; no casts are seen; sp. gr. 1020.

Dr. Gull ordered a castor-oil enema, to empty the lower bowel; and that she should be fed by nutritive enemata, consisting of beef-tea, eggs, and brandy, twice a day. To take ten grains of biborate of soda, and half a drachm of syrup of tolu, in water; also a little milk and ice. A linseed-meal poultice to be applied to the abdomen.

The vomiting, although somewhat relieved, still continued. She became slightly delirious at night and lethargic in the daytime; sank gradually; and died quietly at half-past two A.M. on the 8th February.

Sectio cadaveris, twelve hours after death (conducted by Dr. Moxon).—The pyloric third of the stomach was found with its calibre contracted, so as only just to admit the point of the little finger. This was due to a thickening and contraction of the coats of the stomach in that situation, forming a tumour (the one felt during life), which, on section, was found to be composed of a layer of hypertrophied and indurated muscular coat two-fifths of an inch thick; and outside this was about the same thickness of hard yellowish adipose tissue, much thickened on the side of the greater curvature. In the interior of the portion of the stomach surrounded by this thickened mass was the cicatrix of an old ulcer (probably three or four years old), about the size of a shilling: this ulcer was on the greater curvature of the stomach and about one inch from the pylorus. The kidneys and other organs of the body were healthy.

In a clinical lecture delivered on the 10th of February, Dr. Gull remarked that the mucous membrane of the stomach is very prone to ulceration; and, also, that certain parts of the mucous membrane of the intestines are liable to ulceration, and certain parts are not. Thus, although the ileum is remarkably liable to disease, the jejunum is rarely or never diseased; in fact, it is less liable to disease than any other organ in the body. There is hardly a single instance recorded of primary ulceration of the jejunum. Our deduction from these considerations must be that much of the liability to disease must lie in the textures of our body themselves. Thus tuberculosis is said to be a constitutional disease; and yet the jejunum does not get tubercle deposited in it. Fever is called a blood disease; and yet fever does not affect the jejunum as it does the ileum. One reason that the stomach is so liable to ulceration is, that it receives the brunt of all our misdeeds in the way of eating and drinking, being frequently injured mechanically by over-distension, and chemically by the ingestion of irritating matters. This condition of thickened coats of the stomach was formerly called cancer, because of its great hardness. Andral said if it were cancerous, it was in the least degree cancerous. But now we know it is not even in the least degree cancerous.

With regard to the presence of albumen in the urine in this case, it was evidently not due to diseased kidneys, for those organs were found to be healthy; indeed, we now know that albumen in the urine is found under varying conditions of disordered circulation—as in fever, erysipelas, &c.

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, FEB. 13TH, 1866.

DR. ALDERSON, F.R.S., PRESIDENT.

CASE OF PHOSPHATIC CALCULUS IN THE MALE BLADDER, WITH A NUCLEUS OF BONE (PROBABLY A SEQUESTRUM DETACHED FROM THE INNOMINATE BONE).

BY HENRY THOMPSON, F.R.C.S.,

SURGEON EXTRAORDINARY TO H.M. THE KING OF THE BELGIANS, SURGEON TO UNIVERSITY COLLEGE HOSPITAL.

A man aged forty was sent to the care of Mr. Thompson, at University College Hospital, by Dr. R. Uvedale West, of Alford, Lincolnshire, in June, 1865, for a urinary affection of two years' standing. On examination, a stricture near the orifice of the urethra and a stone in the bladder were found. On June 27th the stricture was divided by the bistoury, and the first crushing was performed on that day. All going on well, the stone was again crushed on the 30th. On this occasion the débris withdrawn in the jaws of the lithotrite was remarked at the time to be unusual in character, but was not then minutely examined. Four days after this, retention was caused by a fragment impacted in the urethra; this was withdrawn by means of the forceps, and it was at once seen to be a fragment of bone. Other small pieces followed, and the patient went out, cured, on the 15th July. He remains perfectly well at the present time.

It was not until after the appearance of the bone that a minute history of the case was taken. The following circumstances were then elicited:—The patient had had severe pain in the right hip seventeen years ago, and was lame for more than a year. Then an abscess broke externally, the cicatrix of which, among many others, is seen about the joint. Another attack took place three or four years after, from which several abscesses and much pain and lameness resulted. Two years ago another attack laid him up for several weeks, but no external abscess resulted. When recovering from this, he became the subject of some pain and frequency in micturition; and finally the ordinary symptoms of stone appeared, and continued up to the time of his admission.

The author made reference to some analogous but not precisely similar cases, no example of the latter having been at present discovered.

The conclusion which he arrived at after full investigation was, that the origin of the calculous formation in this case was the existence of disease in a part of the os innominatum, resulting in necrosis of a small portion; and that this portion ultimately exfoliated and detached itself, to be extruded, not externally by the surface of the body—not by means of abscess which should follow the usual course along the tracks of muscles or vessels, but by one which communicated directly with the bladder, so that the sequestrum made its way into that cavity, and formed the nucleus of the phosphatic stone for which the patient was subsequently successfully operated on by lithotrity.

CASE OF LITHOTOMY; MULBERRY CALCULUS WEIGHING EIGHT OUNCES AND A QUARTER; DEATH.

BY JOSEPH ALLEN, M.R.C.S., NORWICH.

(*Communicated by* WILLIAM LAWRENCE, ESQ., F.R.S.)

The author was summoned to the Rev. T. C——, a thin

spare man, of nervous temperament, aged fifty-six years, on Nov. 16th, 1864, and found him suffering great pain and irritability of the bladder. He was a married man, of temperate habits. Had been married seventeen years and a half, and had three children growing up. A few days previously he had caught cold whilst performing the funeral service at the cemetery, and had suffered considerable pain in the body since, accompanied with frequent and painful micturition. He had tried several remedies without avail. Opiates and other anodynes, &c., were prescribed, but with only temporary relief. His history was as follows.

He was born in Surrey, and from his boyhood was fond of exercise, running, jumping, &c., but frequently suffered great pain afterwards, and often passed blood in his urine; this he concealed lest he should be debarred from such pursuits. As a young man, hunting had the same effect, but his love for the sport was too great to allow him to give it up. He resided at Calais for eleven years, and enjoyed good health all the time. He afterwards spent seven years in London. He was ill for about three weeks shortly before leaving London with inflammation of the bladder, according to his account. Has resided in Norwich about five years. His health generally has been good, dyspepsia being his chief ailment, which a little carbonate of soda mostly removed. He confessed, however, to great irritability of his bladder for some years past, having been compelled whilst in London to micturate every two hours, and latterly had been unable to retain the urine more than one hour, so that he was compelled to time his visits in the parish accordingly.

On Dec. 5th, 1864, he was sounded by the author in the presence of Dr. Eade, having previously refused to permit it through false delicacy. The sound, immediately on entering the bladder, came in contact with a large and hard stone. The urine contained lithic acid in considerable quantity, also pus-globules.

It was determined to perform lithotomy, which was accordingly done on the 8th of December. The ordinary lateral incision was made, and the stone readily seized with the forceps. On attempting to extract it, however, it was found to be one of no ordinary size. Larger forceps were then introduced, and a firm grasp obtained, but without avail. In order, therefore, to avoid laceration of the parts as much as possible, the fibres of fascia on either side were carefully cut with a blunt-pointed bistoury by Mr. Cadge, traction being made on the stone at the same time. The perineum was enormously distended during the extraction of the stone. After a short time a mulberry calculus, weighing eight ounces and a quarter, was removed. There was scarcely any hæmorrhage, and very little laceration of the parts. The patient was remarkably well after the operation, and for a time progressed most favourably, the wound presenting a healthy appearance, and gradually closing. He was able to retain his urine in the bladder for three hours, a thing he had never done before for years. After a time, however, his spirits began to flag, and he became fidgety and impatient; and although well supplied with nourishment and stimulants from the first, he gradually became weaker, and at last sank from exhaustion on Jan. 20th, 1865, six weeks after the operation.

Mr. HOLMES COOTE said the case related by Mr. Henry Thompson was worthy of great consideration. There was one point, however, on which information was desirable—viz., as to the microscopic structure of the nucleus of the calculus. This would remove the possibility of doubt as to its being bone. Mr. Thompson had said that there was no specimen in the museum of St. Bartholomew's Hospital of a calculus with a nucleus of bone. He (Mr. Coote) remembered a case in which Mr. Lawrence had removed a calculus from the bladder of a woman. In this instance the bone was that of a sheep, and, of course, had been introduced from without. He could scarcely understand how the piece of bone in Mr. Henry Thompson's patient's case could have got into the bladder in the way suggested by the author, with so little irritation. Mr. Coote then spoke in eulogistic terms of the operation in the case brought forward by Mr. Allen. It was probably the largest oxalate of lime calculus that had been removed by the lateral operation of lithotomy. Mr. Coote also remarked that although Mr. Allen had not alluded to the fact, the history of the case clearly showed that the patient did not die of the mere operation. That was skilfully performed, and reflected the greatest credit on the operator. Had there been an autopsy, he (Mr. Coote) had no doubt it would have revealed other diseases as the cause of death. The coma pointed to renal disease. Mr. Coote concluded by saying that the operator was worthy of great praise.

Mr. ERICHSEN agreed in the main with Mr. Coote. He thought it a matter of great importance to distinguish cases of stones in the male and female bladder as regards the source of their nuclei. We know, he said, that in the female bladder the nuclei may be most various substances introduced from without; but a piece of bone was scarcely likely to be introduced by the male urethra. He agreed with Mr. Thompson that it most probably came from the pelvic bone in his patient's case. With reference to the second case, Mr. Erichsen said the stone was very large, although he was not prepared to say that it was the largest oxalate of lime calculus which had been removed by lithotomy. The case was of importance as regards the question of removing a stone through the prostate. In cases in which we hear of such great difficulty in removal, he could not help thinking the gland had been divided beyond its limits. The case introduced the question of small and large incisions in the prostate. No doubt in Mr. Allen's case the best method of getting the stone out was adopted; but he could not think it could have passed through the lateral lobe without extending beyond its limits. Mr. Erichsen concluded his remarks by expressing his opinion that death was caused by renal disease, and not by the operation.

Mr. CHARLES HAWKINS had no difficulty in coming to the same conclusion as Mr. Thompson had; he had very little doubt that a foreign body could make its way into the bladder from other parts of the body. He referred to a case in the practice of Sir Benjamin Brodie, in which the nucleus of a calculus removed from the bladder of a female consisted of a small portion of bone and two imperfectly-formed teeth, and to another case in which large quantities of hair, covered with calcareous matter, had been passed. Mr. Hawkins believed that these foreign bodies had come from tumours connected with the ovaries. Mr. Hawkins then referred to cases in which fæcal matter had found its way into the bladder, and gave brief particulars of a case of calculus in the bladder, the nucleus of which calculus was some vegetable substance derived, he believed, from fæces. In this case, Mr. Hawkins had removed the calculus by lithotrity with success.

Mr. SPENCER WELLS said that, without in the smallest degree criticising the mode in which the very large oxalate of lime calculus had been removed—feeling, indeed, that the operation was a very creditable one to the surgeons concerned—he still wished to ask the author of the paper, simply as a guide to future practice in a similar case, whether it would not give a patient a better chance of recovery, in a case where a stone was known or believed to be unusually large, either to perform the high operation, or to be prepared with some powerful crushing apparatus, by which, after the bladder had been laid open, the stone might be broken and removed in fragments. Either of these plans would seem to be less hazardous than the forcible dilatation or the large incisions necessary for the removal of a very large unbroken stone by the lateral or bi-lateral perineal operation. With regard to the curious substances found as the nucleus of calculi, he (Mr. Wells) might add that he had recently removed a phosphatic calculus from the bladder of a patient who had undergone an operation for vesico-vaginal fistula, and a loop of silver wire which had got into the bladder had formed the nucleus of the calculus.

Mr. HENRY LEE said that Mr. Erichsen implied in his remarks that the best plan to deal with large stones was to cut them out, rather than to tear them out. In this opinion he (Mr. Lee) concurred. Mr. Lee then referred to a case of lithotomy of his own at St. George's for the removal of a very large stone. In this instance he cut, no doubt, beyond the limits of the prostate, and the result of the case showed that the practice did not always lead to bad results. The calculus was phosphatic, and weighed four ounces and a quarter, and there was another stone in the bladder, extracted at the same time, which weighed a quarter of an ounce.

Mr. PROPERT said that twenty-five years ago he had under his care a young gentleman who had a knack of driving things up his urethra. At last he passed up a long piece of sealing-wax. The specimen of wax afterwards removed from the bladder would be found in the museum of St. George's Hospital. Sir B. Brodie, who was consulted, could not discover any foreign body in the bladder, and the patient went to India. After remaining in India some time, symptoms of stone in the bladder came on, and the patient came home for operation. Sir B. Brodie operated, and removed a calculus, the nucleus of which was a piece of sealing-wax. The patient recovered, and went out again to India, when, unfortunately, he was drowned.

Mr. MOORE had had under his care at the Middlesex Hospital a patient, above thirty years of age, who had a similar strange fancy for passing foreign bodies into his urethra.

He one day introduced a piece of sealing-wax. He afterwards had mucous and phosphatic urine, and suffered so much that lithotomy was performed. The piece of sealing-wax was removed and placed in the museum. The fragment was bent on itself, and had the ordinary flattened oval shape of a calculus. It was creased and compressed, as if it had been squeezed into its form by the contractions of the bladder. As regards the source of the nucleus in Mr. Henry Thompson's patient's case, he could not conceive that there could be any great difficulty in the way of the belief that it had been detached from the pelvic bone, and had made its way into the bladder. He did not think the passage of purulent matter from an abscess into the bladder was likely to produce any injurious consequences, and he referred to cases which served to show that the action of urine on abscesses communicating with the bladder did not affect them injuriously; on the contrary, the stimulating action of the urine appeared to produce salutary effects.

In reply to a remark by Mr. Holmes Coote, Mr. MOORE said that he did not mean that pelvic abscesses were not serious, but that the mere entering of matter from an abscess into the bladder was not serious.

Mr. SOLLY agreed with the other speakers as to the great probability that the bone was an exfoliation from the ischium, and he agreed with Mr. Moore that an abscess might empty into the bladder without producing any striking disturbances. In illustration, he referred to the case of a patient lately under his care in St. Thomas's Hospital, who had paralysis of the legs consequent on disease of the spine, and who had quite recovered, after having passed much purulent matter in the urine. The case related by Mr. Allen introduced the question whether it would not be better to crush a stone when it was found to be so large, as in that case, before attempting to extract it. On one occasion he had had prepared beforehand an instrument for this purpose, but it turned out that the stone was not so large as had been expected. He thought the surgeon ought to be prepared with a crushing apparatus, in order to break up the stone when it was very large.

Mr. CHARLES HAWKINS described an instrument—a pair of strong forceps with large teeth—made by the direction of Sir B. Brodie for use in a case of lithotomy, but the instrument was not required, as the stone did not prove to be as large as was expected.

Mr. SOLLY said the instrument he had had made was like the one spoken of by Mr. Hawkins.

Mr. THOMPSON thought the evidence all but complete that the bone had had its origin in the body of the patient himself. Still he should be glad to submit the fragment to microscopical analysis to determine accurately that point. He was, of course, quite alive to the various sources of error on this point. It was not long since he performed lithotomy for the removal of sealing-wax introduced by a patient into his own bladder, and he had more recently removed a hair-pin from the bladder of a male, who had so introduced it. With reference to the important and interesting case of Mr. Allen, there were two points well worthy to be considered with regard to it. First, was it possible to crush that stone through the wound, and so withdraw the fragments, instead of enlarging it? He had seen no instrument which he thought capable of crushing a large oxalate of lime stone, certainly none by way of compression. He had cut a gentleman last summer and removed an oxalate of lime stone weighing 3¼ oz. Before withdrawing it he had applied forceps of great strength, and with a powerful screw in their handles, and he had screwed the handles together, bending the iron, but no impression was made on the stone. The best method he had seen was one employed by Civiale, who, after trying it and perfecting it on twelve or thirteen cases, had just introduced it to the Academy of Medicine at Paris. Mr. Thompson had seen all those calculi so crushed and removed, and considered it a very valuable instrument. It was accomplished by means of perforation by a drill, which split up the stone. Secondly, there was the question of the high operation for such a stone. Could it have been ascertained to be so large—and no doubt such information it was possible to attain—he believed the high operation would have been preferable. The bladder was nearer to the surface above the pubes in a thin individual such as this patient was; less important parts were in the way than in the perineum, and the depth of this region, which is exceedingly embarrassing with so large and spherical a stone, was avoided by that procedure. Altogether it was well worthy of consideration whether such stones should not be removed by the high or supra-pubic rather than by the lateral operation. He inclined to the belief that the former was preferable for these cases.

Mr. JOSEPH ALLEN explained how it happened that leave to make a post-mortem could not be obtained. Although the post-mortem might have revealed renal disease, there had been no positive evidence of it during life. The patient seemed to sink from nervous depression. As regards the prostate, as no post-mortem examination had been obtained, it was impossible to speak positively. He was glad to find that Mr. Henry Thompson, in his reply, had relieved him (Mr. Allen) of the necessity of replying to several questions which had been put to him. Mr. Allen said that the largest stone—not an oxalate—which had been removed in Norwich had been removed by the lateral operation, and the patient recovered. For this reason he did not think of the high operation; moreover, it was not easy to ascertain the size of a stone before the operation.

NEW ARTIFICIAL ARM.

After the meeting, Mr. UREN, of Cornwall, exhibited an artificial arm which he had invented, and which had been made by Messrs. Weiss and Son. This seems to be an improvement on the artificial arm in ordinary use. Movement of the elbow, opening and closing of the fingers, are maintained by the movement of the stump of the upper arm acting on some cords which are connected to the arm and to straps across the trunk. The man who wore it said it was comfortable, and that it was of considerable use to him.

Reviews and Notices of Books.

On the Pathology and Treatment of Venereal Diseases, including the Results of Recent Investigations on the Subject. By FREEMAN J. BUMSTEAD, M.D., Lecturer on Venereal Diseases at the College of Physicians and Surgeons, New York, &c. A New and Revised Edition, with Illustrations. pp. 640. Philadelphia: Blanchard and Lea. 1864.

A Treatise on Gonorrhœa and Syphilis. By SILAS DURKEE, M.D., Consulting Surgeon to the Boston City Hospital, &c. Second Edition, Revised and Enlarged, with 8 Coloured Illustrations. pp. 467. Philadelphia: Lindsay and Blakiston. 1864.

Lectures on Venereal Diseases. By WM. A. HAMMOND, M.D. pp. 287. Philadelphia: J. B. Lippincott and Co. 1864.

[SECOND NOTICE.]

DR. DURKEE'S production is one of those the perusal of which impresses the reader in favour of the author. The general tone, the thorough honesty everywhere evinced, the philanthropic spirit observable in many passages, and the energetic advocacy of professional rectitude, speak highly of the moral excellence of the writer. Nor is the reader less attracted by the skill with which the book is arranged, the manner in which the facts are cited, the clever way in which the author's experience is brought in, the lucidity of the reasoning, the frequent and extremely fair allusions to the labours of others, and the care with which the therapeutics of venereal complaints are treated. And is it not strange that such a man should (by some slip of the pen very probably) say, in speaking of blennorrhagia, that "the disease is, now and then, as obstinate as it is *disgusting!*" "Homo sum, nihil humanum alienum puto." This should always be strictly adhered to by medical men.

Dr. Durkee's book is an amplification of a prize essay; it has gone through two editions, and was written when the United States were distracted by civil war. This latter circumstance speaks highly of the industry and perseverance of the author. Like most American volumes we have seen, it first recommends itself by outward appearance. The half-binding is much firmer than ours, and the edges are cut like those of a full-bound book. Could not this be introduced here? Another American feature is the printing, at the beginning of the work, not only the opinions of the press, but all the laudatory letters received by the author from men of note in the profession. The coloured illustrations are not so good as we are accustomed to see on this side of the Atlantic: they are somewhat hard, but they give an approximate idea

of the pathological states they represent. Dr. Durkee has, however, contrived to arrange his illustrations in such a manner that no one, though unconnected with the medical profession, need turn away from them.

The writers of some of the laudatory letters above alluded to congratulate the author upon publishing an original American work; and one of the correspondents says: "We have relied too much and too long on foreign authors." We gladly echo this praise, and are happy to find that our three authors have, to a certain extent, inaugurated a new era in American medical literature. It must not, however, be supposed that any of the works teem with original matter; but the practice and experience of the authors, as well as of other American surgeons whose labours are mentioned, yield extremely interesting and valuable material.

Dr. Durkee's cases are especially important, and very appropriately related in support of his positions. Those cases, and the author's remarks upon them, stamp him as an excellent practical surgeon (or rather physician, as the phrase goes in the States); and they leave the impression that patients, going to America, could very safely be recommended to him.

Now to what school does Dr. Durkee belong? To the school which, now-a-days, may be called the modified Ricordian. The broad distinctions between gonorrhœa and syphilis are properly dwelt upon. Chancre is treated first as a type, and then as to its varieties; the possible contamination by secondary symptoms is acknowledged, and the mercurial treatment advocated. Dr. Durkee has not the honour of having solved the puzzling problems which, up to this day, have taxed the ingenuity of syphilographers; but he makes the most of what is known, and applies it in a masterly manner to the treatment of the disease. In this latter respect he is extremely full, minute, and clear. Indeed, as to actual practice, the work is valuable, and abounds in rules and prescriptions which may be useful to young and old.

As regards blennorrhagia (which term Dr. Durkee uses synonymously with gonorrhœa and urethritis), the author is at great pains to distinguish simple from specific gonorrhœa, and tries to show that leucorrhœa in women hardly ever generates specific gonorrhœa in the other sex. Herein we must beg to differ from the accomplished author. It is true that a catheter, rheumatism, or hard riding, may excite a urethral discharge, the case being then clearly an attack of urethritis; but what shall we call the discharge consequent upon intercourse? Urethritis again, the exciting cause having been an irritating vaginal secretion. That this secretion in the female is extremely often altogether independent of previous contamination everyone allows; and the more or less pungent qualities of the vaginal (perfectly innocent) discharge may account—leaving peculiar male susceptibilities out of the question—for the greater or less degree of urethral inflammation which follows. "*Specific* gonorrhœa" seems an incorrect expression, save when the discharge is connected with a chancre. Dr. Durkee, as we have stated above, very fairly quotes the opinions of surgeons who fully believe in the contaminating properties of leucorrhœa, and especially mentions Mr. Whitehead; though our author closes by saying that he agrees with Sigmund, who contends that *gonorrhœa alone produces gonorrhœa*.

A simple question might be asked the author of this book: What restriction would you put upon a man suffering from your simple gonorrhœa? Surely, if his affection is so simple, he can hardly do any harm? But we find that Dr. Durkee, in another part of the work, lays down very stringent and very proper rules in this respect.

We consider the chapters on the treatment of gonorrhœa very complete. The author does not attempt the expectant method, and is free from the too frequent and modern bias of letting diseases run their course. He is a believer in the well-known remedies, and, from an extensive experience, tells us the best mode of handling them. Nay, we are told of certain modes of using copaiba which the author has not tried, but which he feels bound to mention to his American friends. Among these are injections of copaiba diluted with water. We would add that Langlebert, of Paris, has found distilled copaiba water a good menstruum for such astringent salts as may be used. In talking of cubebs, the author says it may be taken in *enchanted* wafer, this being a French article. He was misled by the popular way of pronouncing the word. It should be "*à chanter*," not "*enchanté*," the former being the short for "*pain à chanter la messe*"—a wafer used in going through the ceremony of the mass.

The chapter on gleet is very satisfactory, the author being a great advocate of blistering the penis with cantharidal collodion, a practice which Mr. Acton has given up. We were surprised to find Dr. Durkee deprecating a most effective remedy—viz., brushing the oozing and inflamed surfaces in balanitis with the stick of nitrate of silver. (p. 76.)

As to orchitis the author gives us a piece of news. We are told that this complication is rare in the States.

"Any apparent immunity from this accident among our people, compared with its frequency among transatlantic subjects, must be ascribed, if real, not to superiority of treatment, for that we do not claim; but rather to the more provident and careful habits which characterise the ordinary classes of our citizens. These remarks involve no contradiction; nor, I fancy, do they really traduce 'our distant neighbours.'"

For induration of the epididymis Dr. Durkee hints that a mild mercurial course may be tried. He, very probably, will have but few adherents here.

We were extremely pleased to see the author describing a complaint very seldom noticed in classical books—viz., *eczema preputii*, as compared with the well-known *herpes* of the same part. Excoriations and urethral pains receive proper attention; and these chapters are followed by one on spermatorrhœa, which, after perusal, we marked "very good." We think, however, the author goes too far in saying (p. 187), "It is no more than truth to say that Lallemand's instrument is now regarded with instinctive horror, and as a barbarous weapon: and its introduction into the urethra of any man should not be attempted until all other resources of surgery have been appealed to in vain."

Gonorrhœal ophthalmia and the purulent ophthalmia of newborn children are very cleverly handled; and, on gonorrhœal rheumatism, we have only to find fault with a passage in the paragraph on diagnosis, "the almost total absence of pain in the early stage" (p. 158). This does not square with our experience.

In the advice given respecting vegetations, we are again grieved to find this phrase, "Excision is a painful procedure to the patient, and will rarely succeed alone in annihilating these *disgusting* formations" (p. 165). That word may possibly be less objectionable in the States than it is with us.

To be complete, the author should have mentioned, in the chapter on Blennorrhagia in the female, the intra-uterine injections advised by Vidal.

We think, however, that the 186 pages devoted to discharges and their consequences are used to very good purpose; but we should have been glad to be told something about the buboes which may accompany gonorrhœa, and even simple balanitis. We have seen them as the consequence of a mere collection of smegma between the prepuce and gland.

SMALL-POX is raging in the Quartier of Paris near Vincennes. The hospitals of La Pitié and of Vincennes are crowded by its victims. In consequence, orders have been issued to officers in command to have the men of the regiments quartered in that part of the city revaccinated. A heifer infected with cow-pox was accordingly sent to the barracks of the Cent Gardes, and all the men, as well as the officers of the corps, were duly vaccinated from the sick animal.

THE LANCET.

LONDON: SATURDAY, MARCH 3, 1866.

THE Second Report of the Cattle Plague Commission, and the legislation upon the subject of the plague, accomplished or in process, call for some notice at our hands.

The Report does not divulge any discoveries on the part of the Commission as to the essential nature of the rinderpest. Its principal importance is to be found in the fact that the able men of whom the Commission is composed, after all the consideration which they have given to the subject and with the light of three months' additional experience, are not able, in February, 1866, materially to modify the advice which they gave to Her Majesty in their first Report. Before alluding more particularly to this, we may extract some evidence from the Report as to the susceptibility of cattle to this disease. As will be seen from the following table, this susceptibility fluctuates from 43 to 61 per cent.

"Of the total number of cattle on farms, in sheds or other places, where the disease has been officially reported to exist, (after deducting those slaughtered healthy) there were attacked in every 100—

Up to Nov. 4th	44	Up to Dec. 23rd	51
11th	43	30th	51
18th	44	Jan. 6th	51
25th	44	13th	52
Dec. 2nd	44	20th	53
9th	50	27th	54"
16th	61		

The interval between the Reports has been characterized by hopefulness on the part of the public, and partly, too, of the agricultural class, of the discovery of remedies. We all remember the suggestions of remedies with which the public press teemed in the closing months of the last year, and which often secured to find honourable and prominent place in proportion to their manifest absurdity. One great consequence of this was a steady diminution of the proportion of animals killed, and a steady growth in the disposition to give infected animals a chance of recovery under some form of treatment. Some of these modes of treatment were perfectly harmless in themselves. But the general result of this disposition to spare animals and trust in remedies has been unfortunate. The facts tabulated in the Report of the Commission show that "as the number of diseased animals killed has diminished the per-centage of attacks amongst the animals exposed to infection has increased, while the per-centage of deaths from disease amongst the animals attacked has risen still more steadily and in a greater proportion." Every diseased animal spared being a manufactory of the plague-poison, the longer the animal lived, and the larger the number of such animals, the greater the amount and virulence of the morbid poison in the country. Under the stern and severe doctrines of Prof. GAMGEE which reigned at the beginning of this calamity, more prompt and extensive slaughter was practised; and apparently this had much to do with the comparatively slow progress of the plague for the first few months. Then came the abuse of Prof. GAMGEE and of his poleaxe, which we must admit is an ugly and opprobrious instrument in the hands of a professed healer. The *rationale* of his advice was less considered than the nature of it. It admitted of misrepresentation and discredit, and almost provoked them. Nevertheless, Professor GAMGEE is likely to see his doctrines in the ascendant at the close—should we speak of the close yet?—of this calamity as they were at the beginning of it; and to no other doctrines are the best informed minds of the country looking now for the suppression of this plague. It is not that a certain proportion of cures might not be achieved by a judicious treatment of affected animals in anything like leisurely circumstances, but that it is highly unwise to risk the infection of healthy animals for the chance of saving a small proportion of the diseased.

The other principal facts brought out in the second Report of the Commission are: that the more highly bred animals succumb sooner than others to the plague; that the disease has advanced with winter; that the exact mode of the introduction of the present plague into this country is not yet made out, though no doubt is entertained by the Commissioners that it originated in contagion; that vaccination is not a protection against the disease; that inoculation with the matter of the disease is of doubtful utility; and that no reliable methods of treatment have yet been discovered.

Nothing was left for the Commission but to say that "the only means of combating the disease which remain consist in the stoppage of the movement of stock and of things likely to be vehicles of infection, in the isolation and slaughter of infected cattle, and in the use of disinfectants."

On one point the Commissioners have apparently somewhat changed their opinion—viz., on the utility of slaughter. They do not say much about it, indeed, in their Reports; but two or three sentences in their first Report show that their opinion was that unless the disease were confined to a few spots, and the number of animals affected were very few, slaughter was wasteful. In the second Report, issued at a time when the extent of the disease is vastly greater than when the first was issued, after pressing the importance of restricting the movement of cattle and of isolation, they say: "Recent experience appears to indicate further the expediency of slaughtering infected cattle, provided this can be done without injustice to the owners."

We need not go into the particulars of the action of Parliament in this matter. It has recognised the principle that this plague is a national calamity, and that it is an act of prudence on the part of the nation to submit to taxation for the purpose of facilitating the suppression of the disease. The measures which Parliament has passed or is in the act of passing are founded upon the simple fact of the intense contagiousness of the disease, and consist essentially in a restriction of the movement of cattle; in the slaughter and burial of infected cattle, including convalescent animals, and—this at the discretion of local authorities—even of healthy animals which have been exposed to the infection; and in the compensation of the owners of the animals slaughtered. The weakness of the Government in the treatment of this question was apparent even on the most vital points. It was against the Government that the prohibition of transit of cattle by railway was carried. Sir GEORGE GREY and Mr. HEADLAM stoutly fought for the point that railways should be permitted to carry cattle

to towns having great cattle markets. It is no doubt a very serious measure to prevent the movement of live stock through the country. But it will be more difficult and more serious a month hence than now; and it is inconceivable that the conveyance of cattle through the country in trucks is not a most efficient mode of propagating the disease. There are two or three other considerations which should make our assent to this measure cordial. It is not likely that the inconvenience arising from it will be so great as we at first are apt to imagine. It is a peculiarity of the railway and telegraph times in which we live that the arrangements of trade are pliable and plastic. Butchers have a strong tendency in the direction of slaughterable beasts, and we doubt not will turn up where they are wanted with a promptness that will surprise themselves as well as the public. The conveyance of dead meat must be a much easier and cheaper process than the conveyance of live animals; and consumers of meat will get it in a healthier state than at present—at any rate at this season. We do not trouble ourselves much with thinking of the cruel and deranging ordeal through which animals pass during the few days before slaughter, but a very little reflection will make it easy for us to appreciate the evidence of Mr. WAY, a butcher in extensive business in London:—

"5184. (Dr. Quain examining.) Your distinct impression is, that the flesh of oxen suffers considerably by lengthened journeys on railways?—It depreciates in quality and in weight also.

"5185. How much is it diminished in weight?—We calculate, and have pretty good authority for our calculation, that an ox will lose one stone a day (that is, eight pounds a day) in its transit, say from Scotland, for instance, to London."

The dead-meat idea is not such a novelty as we are apt to suppose. Mr. WAY says there are butchers in London, doing about the same amount of business as himself, who never kill anything, but get the whole of their meat from dead-meat markets. More than a third of the meat used in London, according to Mr. WAY, is supplied from the dead-meat market. And in the Commissioners' Report it is stated that from Aberdeen alone upwards of one thousand carcases are sent up weekly to London during eight months of the year.

We have only now to watch a great experiment—the reluctant attempt of a constitutional Government to do what can only be done well in a despotic way. We wish we could say that we are sanguine of the result. There is little good in indulging in unavailing regrets, but there has been a terrible want of statesmanship and government in this matter. Six months ago the essential nature of this calamity was pointed out, and exactly the measures which are now being adopted were urged upon the Government by the medical press and by veterinary authorities. Three months ago the seriousness of the matter, the intense contagiousness of the disease, was apparent to everyone, and our great statesmen did nothing commensurate with the crisis. Even now, but for private members, we should have had the cattle markets continued in the large towns, and live cattle transmitted to them by railway. As it is, the restriction of the movement of cattle is to be limited by various exceptions in Mr. HUNT's Bill.

Our principal fear is that the disease is now so extensively diffused—that the foci of the contagion have been so seriously multiplied, that the restrictions imposed upon the traffic in and movement of cattle may not suffice to stop the progress of the plague. But we shall never have more power over the disease than we have now. We may hope that, by universal energy and earnestness on the part of local authorities in using the powers with which they are vested, the affected stock of the country may be quickly killed off. The only chance of doing good is by a despotic destruction and isolation of diseased animals. It is a very extreme measure. But it is the least of two evils. To be effective, however, it must be thorough. And if it is not to be thorough, it will not only be ineffective, but wasteful. By half measures we shall lose the animals at present affected, and not save that portion of them which has so far escaped. The hope of a cure will do most to hinder and vitiate the "stamping out" experiment. Men like Mr. WORMS will always be forthcoming. Under any less urgent circumstances we should be glad to have them trying all kinds of experiments. But surely the search for a cure had better be left with the Cattle Plague Commissioners and the Privy Council, who, by clause 15 of the Act, may reserve affected animals for the purpose of treatment. We are in no humour to make light of any reasonable suggestion of remedies. But it is extremely unlikely that Mr. WORMS's onions and garlic will prove much more effective than the remedies which have been already tried. Mr. SIMONDS reports that some of Baron ROTHSCHILD's cattle, said to have been cured of the cattle plague by Mr. WORMS's treatment, have never had it. Mr. SIMONDS says: "Of twenty-five animals, eleven are really unaffected, five are not severe cases, five have died, and four are sinking under the attack." Errors of diagnosis like those of Mr. WORMS will beget false hopes, and lead to an evasion of the Act which has just been passed. Everything depends on "local authorities," who are now on their trial. We shall close with a few words, at once for warning and encouragement, from the first Report of the Commissioners referring to the cattle plague of 1745. "The plague, in consequence of these orders, was extinguished where the local authorities acted with vigour, but lingered in other places, from which it spread after a time as rapidly as ever." On that occasion it lasted twelve years, and destroyed several hundred thousands of animals. If we can extinguish it before June, we shall show that we have more power than our forefathers had, and that our growing love of personal and commercial liberty can be subordinated to considerations of prudence and forethought.

THE Association for the Improvement of Workhouse Infirmaries promises fairly to fulfil its important objects. *The Times*, speaking of the Reports in these pages which have given rise to that Association, says that "upon the face of these disclosures it is clear that either the public standard of charity should be raised, or the officials brought up to a higher sense of their duty." The *Pall-mall Gazette*, which more clearly apprehends the proposed object of the Association, says, "A more charitable work, a work less liable to abuse, and more emphatically deserving of every kind of support, has not been set on foot for years." The *Sunday Gazette*, the *Daily News*, the *Morning Star*, and probably other journals which we have not seen, warmly support the objects of the Association. Its precise aim is to bring clearly before the public mind, in an impressive and summary form, the terrible shortcomings of the present system, or want of system; its radical defects, as well as the collateral cruelties and injustice incidental to its

operation. We believe that all persons who have any knowledge of the constitution of a workhouse, its mode of government, the character of the guardians, and the objects with which they are elected by the local ratepayers, will readily understand how it is that as the sick wards of a workhouse are only, as it were, accidental excrescences of the workhouse, they never are, and never can be, either in government, arrangement, or service, fitly used as hospitals. Nevertheless they are great hospitals—*the* great hospitals of London. This is the one principle upon which this Association has been founded: to declare that the sick paupers have the same claim to properly organized nursing, dietaries, wards, and medical attendance, as the chance inhabitants of voluntary hospitals; and to claim that those principles on which all men of all countries are agreed in treating the sick, should be applied to the paupers in these our State infirmaries, as well as in the voluntary hospitals. Thus all people agree, that for the sick, when congregated, buildings of suitable construction are necessary; nurses properly trained and of sufficient number; resident medical officers; a dispensary within the building, and dispenser equally at hand; visiting officers who are not bribed by the terms of their engagement—however generously and magnanimously they may reject the promptings of interest—to stint necessary medicines in quantity, quality, or variety, and whose work is not disproportionate to the time at their command. To these principles, which all people agree to be essential, the present organization is directly opposed in all its features. Even where there are 200 or 300 deaths annually, we find no medical officers resident. The visiting officers are pecuniarily interested in the supply of medicine or the labour of dispensing them; the wards are overcrowded; the patients are dieted under the stringent influence of a concealed system of intimidation; the nursing is a cruel mockery. The charge of the able-bodied poor and the administration of out-door relief to paupers involve a different system and another set of feelings, altogether opposed to those which govern the infirmary; the two cannot well be carried on by the same machinery. The relief of such paupers is a duty belonging to the Poor-law Board; but it can only be carried out by the adoption of an hospital system—a uniform system,—economical yet humane, intelligent, guided by a knowledge of the laws of sanitary construction and administration, and informed by experience. It can only be carried out efficiently and with true economy in those infirmaries or hospitals managed by duly experienced persons, responsible to the Poor-law Board, individually responsible to public opinion, knowing their duties, and not daring to neglect or ignore them. This is what this Association aims at bringing about, through the aid of Parliament and under the sanction of the Poor-law Board. It is no new machinery which is proposed, but a necessary modification of that existing. That which exists is a thing of shreds and patches. Something is needed now, more homogeneous, more workable, less susceptible of infinite abuse by the ignorance and the parsimony of individuals, less productive of scandal, and more in accordance with the spirit and manner of the administration of our voluntary institutions for the care of the sick.

CAMBRIDGE UNIVERSITY.—Dr Humphry has been elected Professor of Anatomy, and Mr. Alfred Newton Professor of Zoology and Comparative Anatomy.

Medical Annotations.

"Ne quid nimis."

THE RATING OF HOSPITALS.

MR. G. HARDY has called attention in the House of Commons to a recent decision of the House of Lords, of which the consequences are likely to be very serious. This decision (on the rating of the Mersey Docks) reversed the judgment of Lord Mansfield, by which that learned judge decided a century ago that the hospital of St. Luke in London was not ratable, because the trustees had no direct or beneficial interest in it; and the occupiers, being the poor persons who received the benefits and comforts of the institution, could not of course be rated. The effect of this reversal will be to render all the hospitals and charities liable to rating for the poor. Mr. Hardy went on to show that it could never have been intended by the statute of Elizabeth that charitable institutions should be rated. It was remarkable that while the statute of Elizabeth enumerated all that should be rated, a subsequent clause, section 15, laid down this proposition—that the "surplusage of the rates should be distributed by the justices for the relief of the poor hospitals in the county, and of those that should sustain losses by fire, water, the sea, or other casualties, and to such other charitable purposes for the relief of the poor." It was, therefore, pretty obvious that, inasmuch as this allusion was made to charitable institutions, which, so far from paying rates, were to receive the surplus of rates, the intention of the statute of Elizabeth could not have been to rate charitable institutions. He instanced King's College Hospital as an example of the injury which such rating would inflict, calculating the amount which it would have to pay at £250 per annum. The public subscribed to hospitals and charitable institutions; but they were anxious that their money should go direct to objects of charity—not to the payment of rates and taxes. If a person was injured in the streets he was carried to the hospital. In fact, an hospital was made as much use of as if it belonged to the public; it was a constant benefit to the public. The question, then, was whether they should entirely change the position in which it had hitherto been placed, and render it liable to rates. The loss to parishes by a portion of their land being occupied by charitable institutions was more than made up by the benefits conferred upon the district by such establishments. If hospitals were to pay poor rates, in addition to providing for sick paupers, the time would come when they would refuse to receive paupers unless the parish contributed towards their expenses. Mr. Hardy suggested that, under these circumstances, legislation in favour of charitable institutions was desirable. We are sorry, however, to find that Mr. Villiers holds out no hope that the Government will take any steps in the matter.

INFECTION, DISINFECTION, AND SPECIFICS.

THE author of a letter signed "Y," in *The Times*, writes this week with a good sense which is very refreshing upon several points connected with this subject. He refers to the scientific progress of medicine in language which is just and temperate, and such as educated physicians hold. Typhus, scarlatina, and small-pox are diseases resembling cattle plague in their general characters: we have given up talking of specifics for them; not of dieting, not of a subsidiary treatment; but we don't aim blunt shafts which we call "specifics" at them. Prevention by cleanliness, good ventilation, isolation, disinfection; by destruction of the germs of the disease in their birth-place; by vaccination, it may be by inoculation; careful dieting: and possibly such stimulant and detersive remedies as tincture of sesquichloride of iron, hyposulphite of soda, &c., and, if you please, assafœtida, are not without their

use. But then we have long known that with a disease so contagious, and in dealing with brutes, "*le jeu ne vaut pas la chandelle.*" The same would probably hold good in treating most severe epidemics of contagious disease; and if it were always permissible to stamp out the first blazing cinders, we should not suffer from any of these devastating epidemics. Once they have extended, it is difficult indeed.

How to disinfect an inspector? Here is a subject for Angus Smith, or for *Punch*. Inspectors and butchers must expect to be tarred, if not feathered. A good coating of coal-tar every time they come out of a shed might be the best precaution. But what a toilette! What washing; what a robing and disrobing; what tender attentions and minute sumptuary regulations, will be necessary! And after all, will they succeed in destroying the enemy? Not to speak of birds, flying insects, and dogs, the wind and the brook may each of them carry the poison. It is borne across country. In how many cases has minute examination failed to discover the source of contagion let the Earl of Granville, let Miss Burdett Coutts, bear witness. We fear we must prepare for a long visitation; but if the importation of foreign cattle can be maintained on a very large scale, and *abattoirs* be constructed at all the outports, the nation may not, after all, suffer so excessively as terrorists would have us fear.

METROPOLITAN WATER-SUPPLY.

IN our remarks upon the supply of water to the metropolis last week we briefly alluded to the scheme proposed by Mr. Bateman, and now proceed to its more minute investigation.

The region from which Mr. Bateman proposes to draw the enormous supplies required lies to the south of the well-known Bala Lake and to the east of the mountain ranges of Cader Idris and Plinlimmon, being that from which the rivers, with highly Welsh names, Banw and Vyrnwy, tributaries of the Severn, take their rise. We need hardly remind those who have essayed tours in this region of the almost constant fall of rain, varied by thick, through-wetting mists which abound in it, and they will not be inclined to dispute the propriety of classing its rain-fall as equal to that of Cumberland, which, in some parts, has been found to reach the extraordinary amount of 150 inches in the year. Mr. Bateman believes that the average rain-fall both on the mountains and in the valleys from which the Severn derives its supplies is not less than 70 or 80 inches; but wishing to be well within the mark, he bases his calculations as to the rain-fall in the entire district he proposes to take, on 36 inches only. Of course, there must be a certain storage of water in case of continued drought, and it is proposed to form natural reservoirs in the hills by means of embankments, which shall be capable of holding a supply for a hundred and fifty days. When we say that the estimated lowest daily supply for London is a hundred million gallons, the stupendous nature of such works will be readily conceived.

The area from which the rain-fall is to be collected is estimated at about 130,000 acres, and is divided into two nearly equal parts, the water from the reservoirs of each being conducted by separate aqueducts nineteen and twenty-one miles and a half in length respectively, to a point north-east of the town of Montgomery, where the two will join. From this point an aqueduct capable of carrying two hundred and twenty million gallons of water per diem will convey the whole supply to the north of London, passing by Bridgnorth, Stourbridge, Warwick, Buckingham, and Watford to the high land near Stanmore, where service reservoirs are proposed to be constructed at such a height as will admit of the constant supply of water at high pressure throughout the metropolis.

We find it stated that the localities for the proposed reservoirs are situated on Upper and Lower Silurian formations. This is rather a wide description, as three-fourths of North Wales and half Shropshire are Silurian. To a large extent, however, the Upper Silurian in Wales is, geologically speaking, "altered"—that is, its limestone has become exceedingly hard and crystalline, its shales are turned into slate, and its sandstone into quartz-rock, this metamorphosis (due in all probability to fire) prevailing extensively throughout the district in question. The rocks have thus become less soluble and liable to disintegration, and are therefore specially adapted to form reservoirs for water, which would in all probability equal in purity that of Bala Lake, which has but 0·8° of hardness, with organic impurity of 1·28 out of a total impurity of all kinds of 2·08. An important element for consideration will be the possible pollution of the water from mining sources, or even from unworked veins of metal, since copper and lead mines abound among similar deposits in other parts of Wales, although we find it stated that there are no such works in the district itself.

The southern or Plinlimmon reservoirs appear to be situated on the Lower Silurian system, consisting of formations resembling flagstones, shales, and slates, with very little limestone; and these are often associated with curious and extensive ashy beds containing a good deal of feldspar, which would help materially in purifying the water. Throughout the whole district, whether Upper or Lower Silurian, there are numerous volcanic outbursts; basalt, greenstone, the feldspathic ashes already alluded to, and other igneous rocks abound, protruding through and overlying in places the sedimentary rocks, all of which would be beneficial if they were not so frequently accompanied by metalliferous veins.

Mr. Bateman speaks lightly of the engineering difficulties, though we cannot regard them as slight from the geological nature of the ground the aqueduct must necessarily traverse. Thus, starting from the old Silurian tract, it crosses old red sandstone, coal-measures, Permian, new red sandstone, lias, chalk, &c., and has to cross every one of these formations "on the out-crop"—i.e., there are as many great escarpments to be cut through, and as many valleys to be bridged, as there are strata, though possibly by making detours a gorge may be met with here and there, but not in every case.

We have neither space nor inclination to go into the details of expenditure, which are carefully drawn up by Mr. Bateman: it will be sufficient to say that the estimated cost of a partial supply of a hundred and thirty million gallons a day is £8,600,000; an additional expenditure of little over two millions being requisite to raise the supply to two hundred and twenty million gallons per diem. This the projector proposes to meet by a rate which at the worst would not exceed a shilling in the pound upon the rental of the inhabitants of the metropolitan districts, but which in all probability would be very much less were the whole matter taken up by the Metropolitan Board of Works as he proposes.

The whole scheme appears to be worthy at least of consideration and discussion, and it is with the view of bringing it under the notice of sanitarians that we have thus described it.

THE PRACTICE OF BLEEDING AMONGST ENGLISH AND CONTINENTAL PHYSICIANS.

IN alluding to the death of the accomplished French barrister, M. Foucher, from apoplexy, a contemporary takes occasion to question the propriety of the bleeding practised by the doctor who was called in, and to point out the difference which it supposes to exist between English and Continental medical authorities in regard to this point. There is no doubt that recent advances in physiology and pathology, and recent medical experience in England, have all tended to show the uselessness, and often the danger, of much bleeding in most cases of apoplexy, as well as in most other diseases. Now-a-days, apoplexy is a disease suggestive of age, debility, and degeneration; and therefore not to be helped by loss of blood, which occasionally would undoubtedly

determine the death of the patient. All modern medical science and medical authorities make against such a practice. Our more immediate object in writing, however, is to do justice to some of our Continental brethren, and to assure our contemporary that there are great physicians on the Continent who are quite as enlightened on this practice as are English physicians. It so happens that the medical literature of this country has just been greatly enriched by the first part of a capital translation into English of Trousseau's Clinical Medicine, which we shall have occasion shortly to notice more particularly; but in connexion with the distinguished French barrister's death and the adverse criticisms of the treatment, we have great pleasure in quoting the opinions of M. Trousseau, a French physician of the very highest authority. We do this, not only as an act of justice to Continental medicine, but from a sense of the importance of the doctrines held, and of the injuriousness of the practice condemned, by M. Trousseau, and in the hope that his authority will further the acceptance of the doctrines as to the disuse of depleting measures. It is due to this distinguished physician to say that he had given up the practice of bleeding in apoplexy more than twenty years ago, while it was yet in fashion everywhere. The cases of the illustrious sculptor, Gibson, Sir Charles Eastlake, and others show, however, how much it is to be wished that the doctrines of Trousseau, which accord with those of our English school of medicine, should meet with more general acceptance on the Continent.

Referring to a case of cerebral hæmorrhage, M. Trousseau remarks:—

"Perhaps you have been surprised to see me do nothing in this case; and you have asked yourselves why, when so many others would have hastened to employ active treatment and had recourse to bleeding, either local or general, or both, purgatives and revulsives, I simply did nothing? Those who have seen my practice for some length of time have been less surprised, because they know that I never use violent remedies; that I not only abstain from all energetic treatment when the symptoms of cerebral hæmorrhage are as slight as they were in this case, but that I even refrain from doing so in very grave cases—in fact, in all cases of apoplexy.

"My reasons are these: If I do not have recourse to bloodletting, purgatives, or revulsives in cerebral hæmorrhage, whether considerable or not, it is because experience has taught me that the patients do better without them. For when I reflect on what happens then, I do not see how those methods of treatment can be of use, since the hæmorrhage is an accomplished fact when we are called upon to note its symptoms. What influence, I ask, can be exerted on a foreign body in the shape of extravasated blood, by letting out blood from a vein of the arm, or of the foot, or from the jugular, or by dividing an artery, by cupping, or leeches? Of what use are purgatives or revulsives? It is said that bloodletting, and that purgatives (a kind of serous bleeding), empty the vessels, and thus facilitate absorption of the extravasated blood; that they antagonize the cerebral congestion which, according to the practitioners who recommend them, precedes, accompanies, or follows, at the least, the extravasation of blood, and by thus preventing an exaggerated flow of liquid, they diminish the risks of the effusion becoming more considerable or occurring a second time.

"With regard to the first point, we may well doubt whether any difference obtains between cerebral hæmorrhages and other hæmorrhages, and, to take a very simple example, whether any difference exists between what takes place in cases of extravasation of blood into the cerebral substance and extravasation under the skin. In the latter case, has general or local bloodletting ever been seen to facilitate the absorption of the effused blood? Do not most surgeons reject leeches, on the contrary, as being injurious, instead of useful? An individual receives a blow, or falls on his head, for example, and the violent contusion produces a more or less considerable effusion of blood into the subcutaneous cellular tissue. Any medical man who may be sent for will never think of prescribing anything more than cold lotions on the affected part, or using slight compression; and he does so because he knows full well that further interference would, to say the least, be superfluous. Now, can we act more powerfully on ecchymoses of the brain than on those of the surface of the body? Reasoning therefore, agreeing with experience, pronounces useless the treatment against which I raise my voice.

"As to the second point—namely, that bloodletting is imperatively required with a view of arresting the molimen hæmorrhagicum which caused the first symptoms, and might cause them a second time,—it is indeed very doubtful. The part played by congestion seems to me to have been very much exaggerated; and although a great many practitioners believe general or local bloodletting to be so clearly indicated that there need be no hesitation in having recourse to it, I do not think that the necessity, nay more, the usefulness, of the measure has been clearly proved."

DWELLINGS FOR THE WORKING CLASSES: MR. TORRENS'S BILL.

THERE is one matter at least as to which a wonderful change has come over English opinion during the last twenty years. The old English horror of centralization—the fear of too much government—is entirely gone. The *laissez-faire* theory has been abandoned by the English people, and the faith in Bumbledom has grown so weak that we are never easy unless some State official is directing, or overlooking, or restraining "local authorities." The Government is now the banker of the working classes; it sells them annuities upon a scale adapted to their purses; by-and-by, no doubt, it will insure their lives. The other week it received the bitter reproaches of a Parliament mainly composed of squires for having trusted the squires to make fight against the cattle disease, instead of bringing its own superior resources to that very arduous conflict.

If Mr. M'Cullagh Torrens had been a legislator twenty years ago, his prospects as a legislator would have been seriously impaired by bringing in such a proposal as the "Artizans and Labourers Dwellings Bill," which he submitted to the House of Commons last week. But his explanation of the measure was met by no protest, called forth no exclamations; and yet the object of it, stated roughly, is to enable the Government to compel town councils and other local boards to pull down old houses unfit for habitation and to erect a corresponding number of new dwelling-places in their stead.

The Bill is very badly drawn, and the meaning of many clauses is thus left uncertain; but it is to apply to all towns and populous places, and its operation may begin (as we read the draft) in any street or streets or collection of houses, the death-rate of which has for three successive years exceeded three per cent. The Home Secretary, when set in motion either by a resolution of the local authorities or by an application from twenty rate-payers, will direct an inquiry into the sanitary condition of the property complained of. And when any portion of it is found to be unfit for habitation he will order the local authorities to pull it down and to erect upon the same or adjacent sites houses to accommodate as many people as have been displaced. The plans and estimates of the new buildings must be approved by the Home Secretary. Sanitary conditions must be complied with: there must be a window which will open in each room, and the buildings must afford 350 cubic feet of space a-piece for the total number of occupiers. The whole of the money required may be advanced upon the security of the rates by the Public Works Commissioners at 3½ per cent. interest, with provision for repayment within thirty years. The local authority, if it pleases, may purchase houses for adaptation to the purposes of the Act. There is a prohibition of subletting; and rents and terms of tenure are to be fixed by the local authority subject to the approval of the Secretary of State.

Of course, the object of this Bill is most praiseworthy, and something like it is fast becoming a public necessity; it is virtually the Parliamentary expression of Mr. J. S. Storr's recent memorial on the part of the delegates of metropolitan guardians. Overcrowding and unwholesome lodgings are fruitful sources of disease and immorality. Better houses for the masses

—at any rate the destruction of the worst sort of houses—is called for in the interest of the rich as well as the poor. Mr. Torrens's measure involves no new principle, but is virtually a mere extension of the principle of the Poor Law. Just as the State in the last resort undertakes to supply food and shelter to those who would otherwise die for want of them, so it will have to make some attempt to supply the air and the space for the want of which the poor die or fall into pauperising disease. We are quite aware that the extension of the parental function of the State is an exceedingly delicate matter. But it cannot be maintained that our present Poor Law is perfect, or that it expresses the full power, disposition, and duty of the State to keep its poor. Without endorsing the details of Mr. Torrens's Bill, it would appear to us possible for the State to favour the destruction of bad property and the erection of suitable accommodation in its place, with saving to itself and with great advantage to the poor. The city of Glasgow is, to its infinite credit, applying for powers to do that which Mr. Torrens's Bill will enable all towns to do.

THE DISCOVERY OF TRICHINA.

DR. COBBOLD contributes this week an historical notice of the discovery of *trichina spiralis*, in which he minutely examines the literary history of the subject. It results that Dr. Cobbold has, owing to the use of an "if"—which is here not so great a peace-maker as it is usually held to be,—been misapprehended; and he now elaborately and carefully explains the view which he takes of the matter: "Happily the discovery of the actual 'flesh-worm' itself will continue to be imperishably associated with the distinguished names of Owen, Paget, and Wormald; whilst the scarcely less important discovery of the lemon-shaped and calcified capsules must permit a similar bracketing of the names of Hilton, Peacock, and Hodgkin." Tiedemann found only "stony concretions," of which he failed entirely even to guess the parasitic origin. Mr. Hilton, in 1833, detected and described the parasitic character of the affection, "ascribing it to the presence of a minute species of cysticercus, not being aware of the existence of the animal to which the presence of the cysts in question is owing." Professor Owen, in 1835, learning from Mr. Wormald that "Mr. Paget, an intelligent student, had showed that the muscles presented an uncommon appearance, being beset with minute whitish specks" such as Mr. Wormald had more than once himself observed in other specimens, requested to be furnished with portions of muscle so affected, and from these he satisfactorily demonstrated the characters and peculiarities of the entozoon, which he named and classified. The conclusions of this able paper have been singularly confirmed by the subsequent researches of German inquirers, amongst whom Leuckart deserves to be especially distinguished. There would seem to be little room for controversy on such a subject. The priority of the English observers is indeed undoubted. The merit of the person who first notices a spot in a muscle and incorrectly interprets it is not very great; the merit of those who, like Hilton, conjecture its true origin, or, like Owen, examine, interpret, explain, and classify correctly, is of a very different order.

THE ARMY AND NAVY MEDICAL SERVICES.

THE recommendations of the Committee on the Rank, Pay, and Position of the Army and Navy Medical Officers, which we published *in extenso* last week, will, it must be hoped, be carried out intact by the naval and military authorities. In that case we should be able to recommend the services to the students in our schools as fulfilling in the most important respects reasonable expectations. The concessions made are of considerable importance. They include nearly every point of rank, position, pay, and retirement which had been challenged. Of course, even now the medical services of the army and navy cannot be put in competition with the higher prizes of the profession, and the only prospect which they offer is that of a certain competency and an honourable position. Considered in relation to the position of combatant officers, the pay and rank are both liberal; and we see no reason why the services may not now expect a good supply of well-qualified men. It is very notable that the combatant members of the Committee have throughout shown a full and fair appreciation of the just claims of the medical officers, and there is every reason to believe that if Sir James Gibson had honestly and boldly stated their case at the proper time, the present interregnum of discontent would not have occurred.

THE EPIDEMIOLOGICAL SOCIETY.

THE Epidemiological Society devotes Monday evening next to the special discussion of epidemic outbreaks of trichiniasis (spiral fleshworm disease). Dr. Thudichum, whose valuable researches on this malady must be well known to our readers, will read a paper on the subject, and a general invitation is extended to all who take an interest in it.

The subjects which have occupied the Society during the present session deserve to be briefly recapitulated as showing the wide nature of its operations. The session was opened by an elaborate address by the President, followed by a highly suggestive paper "On Cerebro-spinal Meningitis at Rochester," by Dr. Frederick J. Brown. Subsequently communications have been read from Deputy Inspector-General Dr. Lawson "On the Epidemiology of Cape Colony and Natal;" from Professor Pettenkofer, of Munich (read by Dr. Hermann Weber), "On the Mode of Propagation of Cholera;" and from Dr. Alex. Hamilton Howe "On the Laws of Epidemics." At the last meeting an interesting paper was read on an "Epidemic of Varicella in Jamaica in 1865," communicated by Dr. Izett Anderson. There was some doubt among the practitioners of the island whether the disease was modified variola. The question was a very nice one. Dr. Bowerbank, of Jamaica, who was present at the meeting, and who witnessed some cases during the outbreak, held that the disease was varicella. An abstract of an almost unknown report made by Dr. J. Elliott to the Bengal Government on the Prevalence of Remittent and Intermittent Fever in some portions of the delta of the Ganges was also laid before the Society by the Secretary. Sir Ranald Martin has stated in the last edition of his great work "On the Influence of Tropical Climates in producing the Acute Endemic Diseases of Europeans" (p. 310) that the malignant fevers of former days in Bengal, if they had not disappeared, had at least become mitigated. Dr. Elliott's report would seem to make it necessary that this statement should not be taken without limitation. He describes in 1862 endemic fever depopulating great districts and converting formerly cultivated tracts of ground into uninhabited wastes, and becoming rapidly covered with jungle.

THE PROGRESS OF CHOLERA.

WITH the advancing year, cholera is beginning to show signs of greater activity on the Continent. The disease was still prevalent in the south-western provinces of Russia (in Europe), in some parts of Saxony, upon the Bavarian frontiers, and it had not ceased in Paris, when 1865 came to a close. In the course of December, also, cholera appeared in two localities of the Department of the Vosges, Eastern France—namely, in Raon l'Etape and Rambervilliers. Caen and Brest amongst the western departments were attacked the same month. The disease lingered in Paris throughout the greater part of January of the present year; between the 26th December and the 24th January it caused 173 deaths in Caen; and it prevailed in Brest throughout the past and previous month, causing close upon 600 deaths.

At the present moment cholera has not ceased in the suburbs of Brest, and it is spreading in various districts of the Departments of Finisterre, Morbihan, and Côtes du Nord. From Saxony there is no recent news of the disease; but it still exists, and extends slowly, in the south-western provinces of Russia.

It is thus seen that foci of the pestilence remain in Eastern and Western, and not improbably also in Central, Europe. The recent activity of the malady in the western departments of France indicates the probability of its resuming a migratory course as the year rolls on, and the necessity of a careful watch being kept on its progress.

In the more recent extensions of the disease, although it may have shown itself over a wide area, and been as fatal as heretofore, the number of persons attacked has been comparatively small.

THE LANCET RECORD
OF
THE PROGRESS OF MEDICINE AND THE COLLATERAL SCIENCES.

THE POISONOUS ACTION OF NERIUM OLEANDER.

PROFESSOR PELIKAN, of St. Petersburg, recently presented a paper on the above subject to the French Academy of Sciences. He thinks that the researches of Orfila upon the poisonous action of Nerium are not sufficiently satisfactory. From his own observations he is led to believe that the yellow resinous substance which the plant produces is the true poisonous principle. The experiments which he conducted upon frogs with this substance, as well as with the alcoholico-aqueous extract, have led him to the following conclusions:—1. When first administered it produces an acceleration of the heart's action. 2. After a few minutes the beats of the heart become less frequent. 3. The pulsations in diminishing become irregular, and then cease entirely. 4. The ventricles are at this period empty and inactive, but the auricles still continue to contract. 5. Finally the heart becomes completely paralysed. From the results of some experiments on dogs Professor Pelikan is disposed to think that the poison of Nerium oleander very much resembles that of digitalis, and therefore he thinks that it may advantageously be employed in therapeutics.

AMYLOID DEGENERATION OF THE DIGESTIVE TUBE.

In a paper published in the last volume of the Proceedings of the Société de Biologie M. G. Hayem gives an account of an interesting case of this kind of degeneration. The microscopic examination of the intestinal mucous membrane showed that the deposition of amyloid matter took place in the cellular spaces of the arterioles and in the inner surface of the capillaries. A section made perpendicularly to the surface of the tumefied follicles showed around them a great quantity of altered capillaries, which gave off finer transparent branches that travelled into the interior of the follicle. The follicle itself was filled with small granulations and particles of amyloid matter. The two characters, therefore, which characterise amyloid degeneration of the intestine are: 1, degeneration of the arterioles and capillaries, especially those in the neighbourhood of the follicles; and 2, tumefaction with amyloid degeneration of the follicles themselves.

REMOVAL OF THE SUPERIOR CERVICAL GANGLION IN BIRDS.

M. Joseph Michon records an experiment which produced results different from those heretofore recorded. He removed the superior cervical ganglion of the sympathetic in the common cock, and found that there resulted no increased vascular supply, no elevation of temperature, and no contraction of the pupil. He thinks that the phenomenon of increased vascular supply, which is supposed to follow removal of the cervical ganglion, may be produced as the result of injury to the vascular network which surrounds the ganglion.

NATURE OF COLOUR-BLINDNESS.

In a very curious essay on this subject, which has been published in "Poggendorff's Annalen," Herr Dr. E. Rose, of Berlin, describes a new instrument for determining the degrees of colour-blindness. From numerous inquiries he concludes:—1. That with the colour-blind it is always light of the greatest or of the least refrangibility that first becomes imperceptible. 2. That invariably, as the disease increases, the patient ceases to perceive only that light which had previously the greatest or smallest refrangibility among the rays visible to him. 3. That colour-blindness is always characterised by a shortening of the spectrum and never by an interruption. A complete and accurately defined spectrum thus forms by its extent a measure of the degree of colour-blindness. Herr Rose's instrument consists of a mirror, condensing lens, and prism, by which a well-marked solar spectrum is produced, and therefore accurately determines the extent of the affection.

AN AMMONIACAL DEPOSIT FORMED BY DRYING BLOOD.

In the Journal of the Chemical Society Mr. J. A. R. Newlands describes a curious deposit which he found upon the roof of a shed in which blood was being boiled and dried. It was composed of silica, peroxide of iron, and sulphate of calcium in small proportions, but nearly ninety-seven per cent. of it consisted of sulphate of ammonia.

THE ACTION OF THE BROMIDE OF POTASSIUM.

In the November number of the *Cincinnati Lancet* there is a valuable paper on the action of bromide of potassium by Dr. R. Bartholow. Regarding the physiological action of this salt when taken into the stomach, the writer observes:—1. It proves irritant in large doses to the mucous membrane of the stomach. 2. It is rapidly absorbed into the blood and may very quickly be detected in the urine. 3. Its action is upon the nervous system and its effects are sedative; it produces sleep, reduces the action of the heart and arteries, lowers the general temperature, and diminishes the waste of tissue. When its administration has been prolonged the bromide acts as follows:—1. It lessens and finally entirely removes sexual desire. 2. It diminishes muscular power. 3. It retards secondary assimilation, thus preventing the progressive development of tissue.

CHLOROFORM AS A MEANS OF DETECTING BILE IN THE URINE.

A new method for the detection of bile in urine is proposed by M. Cunisset, and is given fully in the January number of the *Journal de Chimie Médicale*. He places in a test-tube forty or fifty grammes of the urine to be examined, and adds to it four or five grammes of chloroform, and then shakes the mixture. If the urine contains bile it immediately assumes a fine yellow colour, and on allowing it to rest, the chloroform falls to the bottom of the tube, drawing with it the fatty matters of the urine coloured by the yellow biliary substance.

HOW TO DETECT THE ADULTERATION OF ARROWROOT.

To those who are familiar with microscopic research, there is no very great difficulty in discovering whether the granules of arrowroot are mixed with those of the starch of potato; but to those who are not microscopists the detection of the adulteration is not easy. The method suggested by M. Albers is, therefore, useful. To one part of the arrowroot he adds three parts of a test-liquid, which consists of two parts of hydrochloric acid of 1·120 density and one part of water. The mixture is now shaken at the ordinary temperature for about three minutes. If the arrowroot be pure it will undergo no alteration, but if it contain potato-starch this will be converted into a gelatinous substance.

UREA IN THE MILK OF HERBIVOROUS MAMMALS.

A note in the *Comptes Rendus* (lxii., No. 4) tells us that M. J. Lefort has succeeded in finding urea in the milk of the cow. From ten litres of milk this chemist obtained one gramme and a half of nitrate of urea, which was easily recognised by the form of its crystals and by its insoluble combination with the nitrate of peroxide of mercury.

THE COMMON INTERCOSTAL MUSCLE OF ANIMALS.

In the last number of M. Robin's *Journal de l'Anatomie* is an able paper upon the function of the common intercostal muscle of domestic animals. The writer, M. A. Goubaux, considers that the office of this muscle has not been properly understood by veterinarians. He states that by reason of its attachment to the transverse process of the seventh cervical vertebra, this muscle has as much action upon the region of the neck as it has on that of the back. He concludes—1. That the common intercostal muscle is an expiratory muscle. 2. That it is an extensor or flexor of the vertebral column (neck and back) according as that of the left side acts independently of that of the right, or according as the muscles of the two sides act simultaneously.

IS UREA FORMED BY THE KIDNEYS?

In a memoir recently published by Herr Dr. Zalesky, this physiologist records some experiments which seem to prove that urea is found in the kidneys, and not in the blood. He removed the kidneys from various animals, and examined the blood subsequently for urea, but without finding larger traces than usual. In animals, however, in which (without removing the kidneys) he placed a ligature upon the ureters, he found the proportion of urea in the blood largely increased. As the consequence of several experiments upon birds, reptiles, and mammals, he concludes that the kidneys do not simply allow uric acid to filter through them, but that they form it, and that urea is equally formed in great part in the kidneys. He does not believe that uræmic accidents are due to the accumulation in the blood of either urea or ammonia, but is more disposed to attribute them to defective elimination of other extractive principles and of water.

DAILY EXCRETION OF UREA IN TYPHUS FEVER.

In the present number of the *Edinburgh Medical Journal*, Dr. Keith Anderson has a paper in which the statements of Parkes and other writers relative to the excretion of urea in fevers are denied. Dr. Anderson has constructed an ingenious chart, showing the relative quantities of urea formed during the successive stages of fever. The general result of his inquiries is to the effect that the quantity of urea excreted daily during the second week was decidedly below the standard of health, notwithstanding that the patients were in a state of high fever, with the temperature and the pulse much above the normal state.

PROFESSOR HUXLEY'S LECTURES AT THE ROYAL COLLEGE OF SURGEONS.

PROFESSOR HUXLEY commenced his fourth lecture by enumerating the common characters of the order *Sirenia*, those which constitute its definition—namely, 1, head small; 2, a nictitating membrane; 3, nostrils valvular; 4, no concha; 5, only two limbs, and these formed like paddles; 6, a rudimentary pelvis; 7, a horizontal caudal fin; 8, sparse hairs on body and large bristles on muzzle; 9, parietals united together in the middle line; 10, nasals small and commonly separated from each other by an interspace; 11, zygomatic process of squamosal large and swollen; 12, tympanic and periotic bones united together, but not anchylosed to the skull; 13, mandible with a large ascending ramus and coronoid process; 14, an odontoid process to the axis vertebra; 15, cervical vertebræ not normally anchylosed together; 16, anterior articular processes wanting in the lumbar and caudal regions; 17, ribs united to both the bodies and the transverse processes of the vertebræ; 18, scapula with a large supra-spinatus fossa; 19, carpals slightly mobile, phalanges never more than three to one digit; 20, horny plates within the mouth; 21, teeth present or absent; 22, stomach constricted and having a large cardiac gland; 23, heart divided at its apex; 24, larynx without cetacean modifications; 25, no third bronchus; 26, lungs extending back over the whole of the abdominal viscera; 27, brain subcylindrical; 28, no os penis; 29, testes abdominal; 30, uterus two-horned; 31, mammæ pectoral.

These characters strongly separate the *Sirenia* from the *Cetacea*, the resemblance between the two groups being mostly superficial and analogical, such as might be expected *a priori* from the similarity of their mode of life; while the general plan of their structure is very different indeed.

The lecturer proposed to dwell at some length on the Cetacean order because it is the most modified mammalian group, and that the structure of which it is most difficult to understand; also because it is an order little known or studied here at present; and finally, because of the important and highly interesting additions lately made to the Hunterian Museum through its zealous and able curator, Mr. W. H. Flower, whose recent investigations with regard to this group Prof. Huxley announced his intention largely to profit by.

The whales are broadly distinguished from the *Sirenia* as *carnivorous* animals; some, as the porpoises, sperm-whales, &c., have teeth when adult; others have no teeth, but their mouths are furnished with plates of baleen, or what is commonly called whalebone—most improperly so, however, as it is merely the modified epithelium of the mouth. This distinction of the members of the order into "toothed" and "whalebone" whales is convenient, but not absolute. The latter are again divided into such as have no dorsal fin—the "right" whales,—and such as are provided with such a structure, as the "humpbacked" and fin whales: these latter are not so extremely modified in their structure as are the right whales. The lecturer selected for description, as types, *Balænoptera* (the piked whale), and *Physalus*. The head is of enormous size (in the piked whale two-sevenths of the total length). There are but two limbs, which are complete fins, the bones being so invested by a continuous mass of fibrous tissue as to prevent the digits being felt as they can be in the *Sirenia*. The tail is horizontal, and medianly insected, as in the dugong. The skin is very thick, and absolutely devoid of hairs except a few on the lower jaw. Beneath the throat are many longitudinal ridges of unknown function. The mouth is enormous, the margin of the lower lip convex upwards. The eye is placed very low down, near the angle of the mouth; it is very small, and destitute of a nictitating eyelid. There are two valvular nostrils on the top of the head. The ear is hardly visible, placed far back, and without a concha. The mammæ are inguinal, one being placed on each side of the vulva. The structure of the thick integument much resembles that of the monducatory plates of the *Sirenia*; for the true dermis is produced into very long columnar papillæ, between which the skin readily splits, as was the case in *Rhytina*. Beneath the skin is the blubber, which is much less in quantity in these animals than in the right whales, on which account, as well as because they possess much less baleen and are smaller, swifter, and more dangerous, they are much less an object of pursuit. The anterior vertebræ are very much flattened antero-posteriorly, and their epiphyses remain perfectly distinct for a very long time. In the middle region of the body the vertebræ are longer, but most so in the anterior caudal region. In the anterior vertebræ there are both fore and hind articular processes; further back the latter disappear, while the former dwindle and are replaced by successively larger metapophyses, or mamillary processes, which lightly embrace the spines of the vertebræ in front of them. In the tail all the processes diminish till they finally disappear, only the quadrilateral bodies of the vertebræ being left. The cervical vertebræ in *Physalus* and other fin-backs do not coalesce, and the axis has a slight rudiment of an odontoid process. Its transverse processes project backwards over the ends of those of the other cervical vertebræ, and almost meet the extremities of the forwardly projecting transverse processes of the first dorsal. The caudal vertebræ have the usual chevron bones, but their transverse processes, or bodies, have characteristic notches, or foramina, for branches of the caudal artery. The first rib has a small head and large tubercle, which last is attached to the approximated ends of the transverse processes of the axis and first dorsal vertebra. The heads of the ribs are scarcely, or not at all, connected with the bodies of the vertebræ, thus differing from other mammals and resembling some reptiles. Only one pair of ribs joins the more or less cruciform sternum, but they do so directly. The skull is much more modified than is the vertebral column, mainly by the enormous prolongation of the facial portion, and the vertical direction, of the nares, by the separation of the parietals (by an interparietal which connects the frontals with the supraoccipital), and by the enormous development of the supraorbital process of each frontal, which carries the eye downwards towards the angle of the mouth. The zygomatic process of the squamosal joins the frontal, the true zygoma being very slender. The premaxillæ and maxillæ are enormous, the latter overlapping the orbital processes of the frontals, as in some seals. In the forms taken as types the small nasals are symmetrical, as also the entire skull. The lachrymal is always present in the *Cetacea*, but, as in the *Sirenia*, is wedged in and destitute of any lachrymal canal.

THE WAY TO LIVE A HUNDRED YEARS.—Dr. Julius Von Fischweilen lately died at Magdeburg at the age of 109 years. He states in his will that the manner of reaching a great age is very simple. Assume, as often as convenient, and especially during the hours of sleep, the horizontal position, the head towards the north pole, and the rest of the body in a direction as much as possible that of the meridian. By this means the magnetic currents which pervade the surface of the globe, keep up a regular and normal kind of nutrition of the mass of iron contained in the economy, and hence arises an increase of the vital principle, which regulates all the organic phenomena having a direct action on the preservation of life.

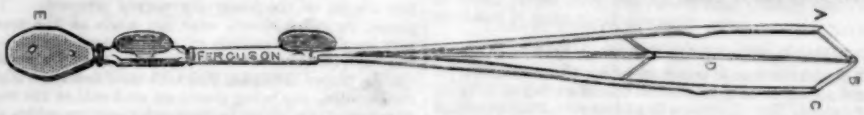
Correspondence.

"Audi alteram partem."

A NEW UTERINE DILATOR.

To the Editor of THE LANCET.

SIR,—Convinced that the uterine dilator at present in use was deficient in its action upon the *internal* os and upper part of the cervix, I have been led to attempt improvements to remedy these defects. The accompanying engraving represents the instrument I have had constructed, the advantages of which will, I think, be sufficiently obvious to those who are acquainted with the dilatation now in general use.



Whether dilatation is required for the introduction of a metrotome, sponge or laminaria tent, or stem, especially when we consider the almost universally strictured condition of the *internal* os in mechanical dysmenorrhœa, it is obvious that the *internal* os and upper part of the canal require to be dilated to at least an equal extent with the remainder.

The engraving represents the instrument open. It has three joints, a central (B) and two lateral (A and C). To the centre one (B) is attached a rod (D), which is included within the two halves when the instrument is closed. By shortening the rod D, dilatation is accomplished to the extent required by turning the screw-handle.

I am, Sir, yours &c.,

J. WM. HEMBROUGH,

February, 1866. Resident Accoucheur at St. Bartholomew's Hospital.

LAMBETH WORKHOUSE INFIRMARY.

To the Editor of THE LANCET.

SIR,—As regards the report in your journal of Feb. 17th on the Lambeth Infirmary, I would state that there are three paid nurses in the female sick wards of that building. The third was appointed in June last, and commenced her duties on the 19th of that month. I believe this was prior to the visit of your Commissioner, but I write this subject to correction.

I am not aware of any deficiency in the number of foot and stomach warmers, bed-rests, or other apparatus of this description for the comfort of the sick. They are at hand when wanted, and are frequently in requisition.

With regard to the diet of the lying-in women, objected to by your Commissioner, it is only used for a few days, and, with the addition of cocoa and oatmeal gruel, during such short period is found to answer well. Afterwards a good diet of meat and beer, &c., is given until the end of the month.

These are, however, minor matters; and I beg leave to bear testimony to the general correctness of the description given by your very able and intelligent inspector of the arrangements of our infirmary.

I am, Sir, your obedient servant,

HY. ST. J. BULLEN,

Kennington, Feb. 20, 1866. Medical Officer of Lambeth Workhouse.

FELIX HENRY KEMPSTER, M.B. LOND., &c.

(DECEASED.)

To the Editor of THE LANCET.

SIR,—Having had the distinguished privilege of the acquaintance and friendship of the late Mr. Kempster, I cannot let this week pass without correcting an error in your notice of him in your number of February 3rd. You say that "he gained two of the three scholarships open for competition;" I beg to state that he obtained all the three, and also the Gold Medal, then the highest reward for Midwifery (the exhibition or scholarship in that department having been since established).

Such astonishing success had never been known before, and only once since, in the case of an eminent gentleman now connected with Guy's Hospital.

I may add a fact illustrative of Mr. Kempster's character, and confirmatory of the old aphorism that "true merit and true humility are always combined." It is, that after passing the examination for the first M.B., one of the examiners observed to Mr. Kempster that he supposed he should soon see him again—viz., at the competition for honours; to which Mr. Kempster replied, "No, I am not prepared for that; I daren't attempt it." The examiner told him he was foolish to think so poorly of himself, and at length persuaded him to alter his intention, with this result, that Mr. Kempster carried all before him.

Mr. Kempster was the admiration of his college (University), and was beloved and respected by all its professors and students, amongst whom was,

Yours, obediently,

Feb. 1866. THE WRITER OF THE ABOVE.

MEDICAL EDUCATION IN FRANCE AND ENGLAND.

To the Editor of THE LANCET.

SIR,—I have just read your article on the above subject. I have lately returned from Paris, and whilst there had full opportunity of comparing the two systems. You say that the examination of the University of London is by no means superior to that of the University of Paris. The grand difference between the two examinations is that that in London is conducted by means both of written papers and *viva voce*—that in Paris by *viva voce* examination only. In Paris, also, the examination in anatomy is not on the dissected subject, the student being only occasionally required to show his knowledge of anatomy practically by tying an artery, or by some other operation. Whether these differences do not tell in favour of London I leave you to judge.

Another thing which would, to most men, render the French examination the easier of the two is that it is at the option of the candidate whether he will take his four final examinations (each consisting of a single subject) at one and the same time, or whether he will put an interval between them.

Most heartily do I concur in your observations on lectures. A good practical lecturer will always command an audience, as may be seen by the way in which the theatre of such a man as Pajot is crowded, whilst those of men who merely read addresses of an hour long are deserted. Could not the University of London give us some really able University lectures?

I remain, Sir, yours &c.,

Bridgwater, Feb. 1866. M.B.

THE NEW FLOUR OF MEAT.

WITH the cattle plague stalking through the land, destroying its hundreds of thousands of oxen, all processes for the preservation of meat become invested with peculiar importance; but when any particular process has for its object not merely the preservation and utilization of meat, but deals with its adaptation to the wants of the young, the invalid, and the aged, it acquires a special interest for the medical practitioner. It is on this ground that we call attention to the method of treating and preserving meat devised by Dr. Hassall, whose letter on the subject appeared in THE LANCET of the 17th of February. Of each pound of lean fresh meat free from visible fat and bone, no less than three-fourths of a pound consists of water, the quarter of solid matter being composed of albumen, fibrin, gelatine, interstitial fat, salts, &c. Now the process in question consists in the removal of this water at so low a temperature that all the other constituents remain unchanged,

and in the reduction of the dried meat to the state of "a flour of meat." It is obvious that such a method, simple as it is (although involving much labour), is one of high importance in its results. A flour of meat containing all the constituents of the meat admits of being employed as food in a variety of ways; it requires no mastication, is of easy digestibility, and may be drunk in any liquid suspended as a light powder. With it, beef-tea and soups may be made in the course of a few minutes, containing, if desired, the whole of the meat. It also forms an admirable material for mixing with farinaceous matter and cocoa, thus rendering them highly nutritious.

Parliamentary Intelligence.

HOUSE OF LORDS.

FEB. 27TH.

LORD GRANVILLE, in answer to questions addressed to him, stated that an inspector had been sent into Northamptonshire to inquire into the outbreak of small-pox among sheep in that county, and that the Custom-house authorities adopted the same precautions with regard to sheep arriving from abroad as in the case of cattle imported into this country.

CATTLE PLAGUE BILL.

Lord GRANVILLE, in moving the second reading of the above Bill, declared himself unable to defend either its principle or its details. At the same time he admitted that some of the clauses would usefully supplement the Cattle Diseases Bill, and therefore he proposed the second reading with a view to the details being carefully considered by a Committee.

The Marquis of BATH thought the period to which the operation of the Bill was limited was too short to be productive of much good.

The Duke of MARLBOROUGH objected to indiscriminate slaughter of cattle, and hoped that some modifications would be introduced.

After a few remarks from the Duke of BUCKINGHAM and Lord ROMNEY, the Bill was read a second time, and was subsequently referred to a Select Committee.

HOUSE OF COMMONS.

FEB. 22ND.

SHEEP INFECTION.

Sir J. C. JERVOISE asked the Vice-President of the Committee of the Council on Education whether, in view of the Order in Council of the 4th of July, 1865, and also of the Order of the 19th February, 1866, relating to "sheep-pox or variola ovina," his attention had been given to the Eighth Report of the Commissioners of Her Majesty's Customs, in which that disorder was termed "scab or variola ovina," the first name implying a disease not uncommon in this country, and very easily cured; and whether he had noticed, in the same Report and page (26), that mention was made of "diseases which are sometimes erroneously supposed to be peculiar to foreign cattle, but which in reality had existed in the United Kingdom many years before the importation of foreign animals commenced."

Mr. BRUCE replied that he could not believe that the Commissioners really intended to say that "scab" and "variola ovina" were synonymous. The opinion expressed in the latter part of the question was a very safe and very possibly a sound one. But from whatever places they came they were now seated in the country. Whether the rinderpest or the variola ovina were imported or not seemed a matter of little importance. The vital questions were, were they contagious, were they likely to spread, and what were the precautions to be taken against them? Precautions had been taken. Out of seventy sheep lately imported from Copenhagen to Hampshire eight had the variola ovina, and of a neighbouring flock ten had died and ten were suffering. The district had been isolated.

Mr. HARDY asked a question of the President of the Poor-law Board. The subject to which it referred is discussed in our first annotation.

VACCINATION.

Mr. BRUCE obtained leave to bring in a Bill to consolidate and amend the laws relating to vaccination.

The Bill was afterwards introduced and read a first time.

FEB. 23RD.

THE QUEEN'S COLLEGES.

Sir R. PEEL, who had notice of motion on the paper for an address to the Queen, praying her to withhold her consent from any change she might be advised to make in the charter and constitution of the Queen's University and Queen's Colleges in Ireland, until the House had had an opportunity of expressing its opinion whether such change was desirable to be made, asked the Chancellor of the Exchequer whether, since the notice was placed on the paper, the Government had decided not to make any alterations in the charter of the Queen's University without first consulting the House.

The CHANCELLOR of the EXCHEQUER replied that the Secretary of State was prepared to lay upon the table, at the earliest possible period, the correspondence, so far as it had gone, relating to the subject; and when it was concluded, and Government had made up their minds, and were ready to announce their conclusions—not before—they would put the House in possession of the fullest information respecting it. The granting of the charter would naturally follow the decision at which the Government arrived on the points which might be embraced in the charter; and it was their intention to place the matter distinctly before the view of Parliament by asking a vote from the House for certain scholarships in behalf of the University, which would be open to all persons qualified to compete for degrees in the Queen's Colleges or other educational institutions.

DISEASE AMONG SWINE.

Sir J. WALSH asked whether the attention of Her Majesty's Government had been drawn to the appearance of a new disease affecting swine in parts of the continent of Europe, and not only destroying the animal, but rendering the flesh poisonous and dangerous to human life?

Mr. BRUCE said that in 1862 Professor Gamgee was directed to report upon the subject of diseases in meat, and among the diseases embraced in the inquiry was the one referred to. A German physician of eminence who had paid special attention to the subject was directed to make a report, and it was published in the last volume of the reports of the Medical Officer of the Privy Council.

FEB. 26TH.

NAVY ESTIMATES.

In moving these estimates Lord CLARENCE PAGET passed a high eulogium on the medical officers of the navy. He referred to the labours of the Committee appointed by the Duke of Somerset, and to the services rendered on that Committee by two eminent medical men—one a member of the College of Physicians, the other of the College of Surgeons. "I am bound," said Lord C. Paget, "to say that both these bodies have given us their most cordial assistance with a view to put the medical officers of the navy in such an improved position as that, while no unreasonable demand shall be made on the public, greater inducements than heretofore shall be offered to tempt them to enter the navy."

FEB. 27TH.

A motion of Mr. AYRTON that a Select Committee to inquire into the local government and local taxation of the metropolis was agreed to.

METEOROLOGICAL OBSERVATIONS.

Colonel SYKES gave notice that on Thursday next he would ask the Government what arrangements were being made for taking systematic meteorological observations either by the Board of Trade or at the Greenwich and Kew Observatories. He would also ask whether foreign Governments had been asked to communicate to our Government any meteorological observations that may have been made in their dominions in order that the knowledge of meteorological science may thus be improved.

The Cattle Diseases (Ireland) Bill passed through Committee with amendments.

During some days in both Houses of Parliament the subject of the cattle plague has been discussed, and various amendments and resolutions proposed. It is unnecessary to particularize them, but the result is that a Bill has passed the House of Commons.

MEDICAL MAYOR.—William Peter Nichols, Esq., senior surgeon of the Norfolk and Norwich Hospital, has been elected Mayor of Norwich.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following Members of the College, having undergone the necessary examinations, were admitted Licentiates in Midwifery, at a meeting of the Board on the 28th ult.:—

Mozey, David Anderson, M.D., Turnham-green; diploma of Membership dated Nov. 16th, 1865.
Pugh, Richard, Llandovery, South Wales; July 24th, 1863.
Rickard, Frederick Martyn, Stoke, Plymouth; May 9th, 1865.
Rickard, Henry, L.R.C.P.Ed., H.M.'s Ship "Wellesley," Chatham; Dec. 6th, 1859.
Sarjant, Josiah, L.R.C.P.Ed., Limehouse; Feb. 23rd, 1859.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Feb. 22nd:—

Lloyd, Thomas Franklin, Finsbury-circus.
Owens, Edward Matthew, Sutton, Surrey.
Smith, Christopher, Paris.
Smith, Walter, Bognor, Sussex.
Tarleton, John Haigh, Birmingham.
Wyllie, Robert, Robin Hood's Bay, near Whitby.

As an Assistant:—

Laslett, Alfred Kent, Canterbury.

ARMY MEDICAL DEPARTMENT.—The Director-General presents his compliments to the Editor of THE LANCET, and begs to enclose a list of the candidates of her Majesty's British Service who were successful at the Competitive Examination in August last, and who have passed through a course at the Army Medical School, showing the combined results of the examination:—

	Studied at	No. of Marks.
O'Reilly, J. J.	Dublin	4485
M'Watters, W.	Dublin	4310
Mally, R. N.	Dublin	4308
Catherwood, W. A.	Belfast	4260
Clarke, E. J.	Dublin	4183
Johnston, W.	Aberdeen & Edinb.	3963
D'Arcy, E. F.	Dublin	3903
Mouat, G. B.	Edinburgh	3776
O'Brien, H. J.	Dublin	3680
Kilroy, P. le F.	London & Dublin	3480
Alexander, W.	Belfast	3468
Lowe, R. W.	Edinburgh	3435
Purden, J. E.	Dublin	3423
Connellan, E.	Cork	3176
Mackinnon, H. W. A.	London	3045
Brodie, J. F.	Galway & Dublin	2960

DR. DEMPSTER, Inspector-General of Hospitals, has been granted the good service pension of £100 a year for his meritorious services.

DROUGHT IN AUSTRALIA.—A paragraph of Australian news conveys the gratifying intelligence that the protracted drought has terminated on that continent.

ASPHYXIA IN INFANTS.—On Monday last, Mr. Carter, coroner for Surrey, held four inquests upon infants who had died of asphyxia from being overlaid by their mothers.

DR. R. FERGUSON'S LIBRARY.—This valuable collection of books will be sold by auction by Messrs. Puttick and Simpson, of 47, Leicester-square, on Tuesday next and four following days.

THE CENTRAL HALL FOR ART AND SCIENCE which the Prince Consort projected is likely to be begun. The site will be to the north of the Horticultural Gardens, and the cost will be £200,000.

SICK POOR IN WORKHOUSES.—A public meeting will be held at Willis's Rooms on Saturday (to-day), the Right Hon. the Earl of Carnarvon in the chair, in support of the Association for the Improvement of the Infirmaries of London Workhouses.

THE POLYTECHNIC INSTITUTION.—At the general meeting of the shareholders held on Saturday at the Institution, Professor Pepper stated that the laboratory had been further utilized by the delivery of regular courses of lectures on electricity, geology, and chemistry.

THE Metropolitan Board of Works held a meeting one day last week to consider how they were to discharge that portion of their duties which the Cattle Diseases Bill cast upon them. On the suggestion of the chairman, it was agreed that Committees of the Board should be appointed, one for each metropolitan borough, who would superintend the carrying out of the provisions of the Act within their respective departments.

PRESENTATION TO DR. BRUSHFIELD.—On the retirement of this gentleman from the medical superintendence of the Cheshire Lunatic Asylum, on Wednesday week last, he was presented with a handsome epergne, together with an illuminated address from the officers and attendants at the asylum. Dr. Brushfield made a suitable reply to the address, and in acknowledgment of the receipt of the plate.

THE SURREY COUNTY HOSPITAL.—Her Majesty has been graciously pleased to present a bust of the late Prince Consort to this hospital. The bust, which is of life size, and of the purest Sicilian marble used for statuary purposes, is two feet six inches in height, and is mounted on an elegant coloured marble pedestal four feet high, making the total height six feet six inches.

HEALTHY HOMES FOR THE ARTISAN.—At the proposed Exposition Universelle at Paris in 1867, a section will be devoted to model habitations, combining the cheapness of construction with sanitary arrangements calculated to ensure the highest degree of health and comfort. The Emperor will exhibit in this section houses constructed on the plan of those he has had erected.

Obituary.

JOHN WATSON, ESQ., M.R.C.S.E.

(NEWCASTLE-ON-TYNE.)

THE medical profession in Newcastle has sustained a loss in the death of this estimable young surgeon. Mr. Watson was a native of Alnwick, Northumberland; and at the time of his death was in his thirty-first year. He was educated at the Neville Hall College of Medicine in connexion with the University of Durham, at which institution he was a lecturer and demonstrator of anatomy. He was likewise surgeon to the out-door department of the Lying-in Hospital, honorary surgeon to the Ragged Schools, assistant-surgeon to the Newcastle Rifle Volunteers, and was distinguished as being one of the best marksmen in the north of England.

Mr. Watson was attended by his friend, Dr. Humble, with assiduity and tenderness. His case was very unpromising at first; but in a few days a partial amendment took place in his symptoms, giving his friends some hope of recovery. This, however, was of short duration, as he gradually sank, and died on the 11th of February, after an illness of nineteen days.

His practice was an arduous one; but by ability, perseverance, and steadiness, he might be said to have just surmounted the difficulties consequent upon commencing medical life in a large town; and there is no doubt that, had he been spared, his position in a short time would have fully rewarded his earlier efforts. Typhus fever, of a malignant and highly contagious character, having been prevalent for some time in the poorer districts of the town, Mr. Watson, with true bravery, threw himself into the combat with the disease. The writer of these lines is well aware that Mr. Watson might without any imputation have refrained from this personal risk; but he responded to what he conscientiously believed was to him the call of duty, and it redounds to his memory and the honour of the medical profession which he has so well sustained, that it was in the fever-stricken dwellings of the poorest of the poor that this hero fell. Naturally quiet and most unassuming in manner, but bold and self-reliant where the occasion demanded, the true type of a gentleman and a surgeon, in the flower of his manhood, he has left us—at once our pride and our regret.—(*From our Newcastle-on-Tyne Correspondent.*)

DR. PONSONBY ADAIR.

IT will be in the recollection of our readers, that some time since we had occasion to draw attention to the meritorious conduct of one of the surgeons of the East India naval service, who, rather than submit to an attempted degradation of his professional brethren employed in the public service, resigned his commission. This gentleman was Ponsonby Adair. Since that period he had obtained a responsible and lucrative post in connexion with the Bombay telegraphic service, to which he was attached as one of the principal medical officers. It is with unfeigned regret that we have received by the last mail from India news of his death,

the particulars of which are now before us in a private letter from Kurrachee, where he died. It appears that he had been up the Persian Gulf in the summer of last year on medical duty, and had sustained a severe attack of cholera; subsequently he was exposed to great hardships at the wreck of the *Hugh Lindsay*, and, never having thoroughly recovered, his system gave way in January last.

Ponsonby Adair was well known before he left England, both at King's College and Westminster Hospitals. At the former place he was educated, and at the latter hospital he was house-surgeon for some time. At both places he was a man of mark, and there was no one who inspired greater respect and affection, both from his gentle and obliging disposition and from the laborious and conscientious discharge of his duties. In fact, his constitution, not naturally strong, had been seriously undermined by two severe illnesses contracted during his hospital duties; and it may be truly stated that there is no instance where a member of our profession more decidedly fell a victim to a zealous discharge of his duties than he whose untimely loss we have to deplore.

DR. JOHN WYBER.

DR. WYBER was the son of a Glasgow citizen, and was educated at the High School and University of Glasgow. We have the most emphatic testimony of his various teachers that, throughout his whole career as a student, he manifested the same qualities of mind and heart which endeared him so much to all his companions, and made him one of the most distinguished, and at the same time one of the most eminently attractive and loveable, among its recent graduates. One of his early teachers speaks of him as "among all my many pupils, first without a second;" and one of the medical professors who watched his later mental development, writing with reference to a practical appointment, says—"I look upon Dr. Wyber as in many respects one of the very best men that have ever passed under my observation." With such solid intellectual qualifications as these remarks imply, and with a large range of varied accomplishments, including a good knowledge of several modern languages, and a profound and cultivated love of music, Dr. Wyber was deservedly esteemed by all who knew him well as one likely to bring honour to his Alma Mater; and, after graduating with the highest honours, he entered the service of the Royal Infirmary as a resident medical officer, passing through every department of the service with the warm approval of his superior officers. During a portion of this period of service he was daily much exposed to the infection of fever, but did not take the disease, and thus came to indulge the hope that he might be constitutionally indisposed to that form of epidemic disease. This hope, combined with a great and habitual sense of duty, amounting to positive enthusiasm for work at all hazards, induced him, some time after leaving the Infirmary, to propose an extension of his residence in the fever wards, with the view simply of prolonging his connexion with the hospital and with the medical school, to which he had also become attached as an assistant or tutorial teacher in the class of Practice of Medicine. The earnest advice of one of his friends and former teachers induced him to abandon this idea at the time, as being fraught with danger, without any compensating advantage; but after a few months spent in two voyages to America, and in a short tour on the Continent of Europe, he was again strongly attracted by the desire of hospital work in London, and appealed most earnestly to the same friend for a favourable introduction to Dr. Murchison, with a view to a vacancy in the London Fever Hospital. It was impossible to resist an ardour so intense and so determined, guided, as it seemed to be, by a clear and deliberately balanced view of the prospects of the future; and, after a short delay, Dr. Wyber was appointed to the office he so much desired, and in performing the duties of which he met his premature death. Up to the very last moment of health, his letters bore the same cheerful, happy tone of cordial satisfaction with his work and with his new friends that had been his habitual characteristic at home; indeed he was looking forward with great interest to new modes of activity in the great metropolis; and his simple, frank, child-like nature had all the capacity of enjoyment which belongs only to such natures in the society of those by whom they are understood and appreciated. Dr. Wyber died at the age of twenty-six years, leaving a gap in the affections of his many friends in Glasgow that cannot easily be filled up. He was buried in St. Mungo's churchyard, and was attended to the grave by several of his teachers, and a numerous array of students, who had come to appreciate his worth both as a fellow-student and as, in his turn, one of their instructors.

Of upwards of thirty medical officers who have been engaged in the dangerous service of the London Fever Hospital during the last thirty-four years, Dr. Wyber is the first who has died of typhus fever. He has fallen a victim to his earnest devotion to the public service, and to his zeal for the practice of a noble and generous profession. His death is another instance of the risk at which medical skill and experience are obtained.

MEDICAL VACANCIES.

Coton-hill Institution for the Insane—Assistant Medical Officer.
Liverpool Royal Infirmary School of Medicine—Lectureship on Comparative Anatomy and Zoology.
North Riding Infirmary (Middlesbro')—House-Surgeon.
Poplar Union (Western District)—Medical Officer.

MEDICAL APPOINTMENTS.

J. ADAMS, M.D., has been appointed Medical Officer for the Barnes District of the Richmond Union, Surrey.
Dr. B. G. BABINGTON, F.R.S., has been elected Consulting Physician to the Hospital for Diseases of the Throat, Golden-square, in addition to Dr. Billing, who already holds that office.
Mr. I. BAILEY has been elected Dispenser to the Radcliffe Infirmary, Oxford, vice Dunwell, resigned.
C. P. BODKIN, L.R.C.S.Ed., has been elected Medical Officer for the Western Division of the Galway Dispensary District of the Galway Union.
J. BRADLEY, M.R.C.S.E., has been appointed House-Surgeon to the Northern Hospital, Liverpool, vice G. W. Armstrong, M.R.C.S.E., resigned.
C. W. BROWNE, M.R.C.S.E., has been appointed Medical Officer for the Kew District of the Richmond Union, Surrey.
F. CLARKE, M.B., has been elected Medical Officer and Public Vaccinator for the Dunfanaghy Dispensary District and the Workhouse of the Dunfanaghy Union, Co. Donegal, vice R. H. M'Loghlin, M.B., resigned.
F. DUFFY, M.D., has been elected Medical Officer, Public Vaccinator, and Registrar of Births, &c., for the Donaghmoyne Dispensary District of the Carrickmacross Union, Co. Monaghan, vice N. W. Keelan, L.R.C.P.Ed., resigned.
J. J. EVANS, F.R.C.S.E., has been elected Medical Officer and Public Vaccinator for the Northern Division of District No. 2 (the Parishes of St. Philip and St. Jacob) of the Clifton Union, Gloucestershire, vice R. S. Mayor, M.R.C.S.E., deceased.
W. K. FARRELLY, L.R.C.P.Ed., has been elected House-Surgeon to the Belfast Union Infirmary, vice R. H. Newett, L.R.C.S.Ed., appointed House-Surgeon and Superintendent to the Belfast General Hospital.
G. B. IRVING, M.R.C.S.E., has been appointed Medical Officer for the Great Stanmore District of the Hendon Union, Middlesex.
T. MICHELL, M.B., has been appointed Medical Officer for the Redruth District of the Redruth Union, Cornwall.
T. H. MOXON, M.R.C.S.E., has been appointed Medical Officer for the South District of Great Yarmouth Parish, Norfolk, vice J. Stephenson, M.D., resigned.
W. PRIDGE, M.D., has been appointed second Assistant Medical Officer to the Dorset County Lunatic Asylum, Dorchester.
T. S. REED, M.R.C.S.E., has been appointed Medical Officer for the Illogan District of the Redruth Union, Cornwall.
F. T. ROBERTS, M.B., B.Sc. Lond., has been appointed Lecturer on Botany at the Liverpool Royal Infirmary School of Medicine.
J. RUSSELL, M.R.C.S.E., has been appointed Medical Officer for the Central No. 1 District and the Workhouse of the Neath Union, Glamorganshire, vice J. French, M.R.C.S.E., resigned.
W. SIMPSON, M.R.C.S.E., has been appointed Medical Officer for the Bolsover District of the Chesterfield Union, Derbyshire, vice H. Moore, M.R.C.S.E.
A. SPEARING, M.D., has been elected Medical Officer to the Antrim Union Workhouse, vice J. Taggart, M.D., deceased.
A. R. SMITH, M.D., has been elected one of the Physicians to the General Infirmary, Hereford, vice W. L. Gilliland, M.D., resigned.
T. WADE, M.R.C.S.E., has been appointed Medical Officer for the Mirfield District of the Dewsbury Union, Yorkshire, vice T. Whalley, M.D., resigned.
J. WARD, M.R.C.S.E., has been appointed Medical Officer to the Penistone Union Workhouse, Yorkshire.
A. WAUGH, L.R.C.P.L., has been appointed Medical Officer for the Midsomer-Norton District of the Clutton Union, Somersetshire, vice R. H. Beedle, M.R.C.S.E., resigned.
T. J. WOODHOUSE, M.D., F.R.C.S., has been appointed Physician to the Royal Hospital for Incurables, West-hill, Wandsworth.
S. E. WOOLMER, M.R.C.S.E., has been elected Medical Officer and Public Vaccinator for the Southern Division of District No. 2 of the Clifton Union, vice Mayor, deceased.

Births, Marriages, and Deaths.

BIRTHS.

On the 11th ult., at Hardingell House, Gosforth, Whitehaven, the wife of W. Somerville, M.D., of a daughter.
On the 19th ult., at Silverton, Devon, the wife of E. M. Puddicombe, M.R.C.S.E., of a son.
On the 19th ult., at Upper Harley-street, the wife of Wm. Wood, M.D., of a daughter.
On the 21st ult., at Hertford, the wife of G. Elin, M.D., of a daughter.
On the 21st ult., at St. Clears, Carmarthenshire, the wife of J. L. Thomas, Surgeon, of a son.
On the 24th ult., at Queen's-road, Dalston, the wife of John D. Jones, M.D., F.R.C.S., of a son.

On the 24th ult., at Lympstone, near Exeter, the wife of A. Bennie, Surgeon of a daughter.
On the 25th ult., at Southampton, the wife of Francis T. Bond, M.D., Principal of the Hartley Institution, of a daughter.

MARRIAGES.

On the 1st ult., at Rodborough, Stroud, Edward G. Gilbert, M.R.C.S., of Bilston, to Selina Ann, eldest daughter of Robert Sacon, Esq., of Borwood House, Rodborough.
On the 17th ult., at St. Michael's Church, Burleigh-street, John Tucker Ross, M.R.C.S.E., R.N., to Mary Julia, daughter of the late T. Nightingale, Esq.

DEATHS.

On the 12th ult., at Liverpool, Dr. J. D. Law, aged 33.
On the 13th ult., F. W. Sarasin, M.D., of Bâle, Switzerland.
On the 15th ult., J. M'Glashan, L.F.P. & S. Glas., of Wilson-street, Middlesboro-on-Tees, aged 45.
On the 16th ult., at Warriston-crescent, Edinburgh, W. M'Nish, M.D., late Surgeon 63rd Regiment.
On the 18th ult., Wm. Milnes Savage, B.A., only brother of James Savage, M.R.C.S., of Swinefleet, West Yorkshire, aged 34.
On the 20th ult., at Leigh, Essex, Henry Leach, M.R.C.S., formerly of Sandgate, Kent, aged 36.
On the 20th ult., at Sandwich, E. Jeffery, Surgeon R.N., aged 75.
On the 21st ult., Jane, the wife of M. J. Bobson, M.D., of North Shields, aged 24.

To Correspondents.

ABOLISHMENT OF TURNPIKE TRUSTS IN ENGLAND AND WALES.

Mr. Joshua Parsons, of Frome, has addressed a letter to a local journal on this subject, and suggests the following plan for carrying out the above object. As that is of great importance to medical men, he suggests the forwarding a petition to Parliament from each district and place in the kingdom by the medical men of the locality:—

"1. Public roads, of all descriptions, to become highways, be placed under the control of Highway Boards, and be repaired at the expense of the county rate.

"2. Every union to be divided into the requisite number of districts, over each of which a surveyor is to be appointed, who, like the Poor-law district officers, should have the sole responsibility of his own district, and be accountable to the Board.

"3. The salaries of such surveyors, with that of clerks and other (if any) necessary officers, to be paid by Government from the Consolidated Fund.

"4. Government to reimburse itself by an extra tax on private horses and carriages, apportioned as the wisdom of Parliament may see fit, so as to impose no burden upon occupiers of land, or others who may be fairly excused.

"5. Government to pay off at once, at fair valuation, the whole existing debts of turnpike trusts.

"6. The existing tolls and trust property to become the property of the Government. The tolls to be farmed to lessees, and collected or received by excise or tax officers until the debt has been so far reduced that the sale of toll-houses and other trust property complete the repayment of the money advanced."

A Country Fellow.—The annual election will take place about the usual time, and, in common with the other Fellows, our correspondent will, no doubt, receive the usual notice. Mr. Wormald, the President of the College of Surgeons, will be the Chairman at the dinner of the Fellows.

Dr. Forbes Winslow's article is in type; but its publication is unavoidably postponed until next week.

A Young Subscriber.—It is impossible to admit a communication into our pages simply because it is sent to us by a subscriber.

James B.—1. Hôpital St. Louis.—2. Huile de cade or oleum cadinum.

TWO THINGS NOT GENERALLY KNOWN.

To the Editor of THE LANCET.

SIR,—I have lately learned two facts, and believing them to be things not generally known, I offer them for information and explanation.

When a woman is just completing her menstrual period, if she put clean body linen (such as a chemise or napkin) next her skin, in nine cases out of ten the discharge recommences. Some women are much more susceptible than others. In one the discharge thus re-established will last several days, in others only a few additional hours, but almost everyone is affected in some degree. Whether the garments are warm or well aired or the reverse makes little or no difference; if it did, slight uterine congestion from the sudden application of cold would be a rational explanation.

How many practitioners are aware that if you test albuminous urine in a tube which *already* contains a trace of nitric acid, your labour will be in vain?

Yours truly,

February, 1866. AN OBSERVER OF SMALL THINGS.

Brithaeus (Edinburgh) forwards to us an advertisement extracted from the *North British Advertiser*, for a governor, matron, and medical officer for the Motherwell Combination Workhouse, at the respective salaries of £50, £30, and £20 per annum. Our correspondent remarks:—

"Surely it is but right that young gentlemen who contemplate entering the ranks of the medical profession should be made aware of the pecuniary 'inducements,' as well as of others. There can be no doubt that the widely-spread system of gratuitous consultation and gratuitous supply of medicines to *all* who may please to come to many of our public medical institutions have greatly tended to cause the community to put little value on the services of medical men generally."

Mr. E. Lane.—Our correspondent should read Aitken's Medicine; Reynolds's System of Medicine, vol. i. (nearly ready); Bazire's translation of Trousseau on Locomotor Ataxy; Whately's Elements of Logic; Mill's System of Logic; Bain on the Emotions; Bain on the Senses and Intellect; Hassall or Beale on the Urine.

L.R.C.P. London.—He had better be designated in full; but it is of no importance, as it is not uncommon for the prefix "Dr." to be employed.

G. B., (Kensington.)—The lady had better consult her medical attendant.

THE MANAGEMENT OF THE NEW SYDENHAM SOCIETY.

To the Editor of THE LANCET.

SIR,—The second letter of "A Member of the New Sydenham Society" requires but little in the form of a reply from me.

Your correspondent seems to think that the Council is to blame in that it has at the present time a considerable balance in the Treasurer's hands. Really this is only a point of ordinary commercial prudence. We have invariably made it our rule to pay our debts promptly, and thus obtain certain advantages as regards cash-price, discount, &c., and to do this we must keep some money in hand. Of course the Society does not attempt to save in the aggregate; it has no object in doing so. We merely aim to carry over from one year an adequate balance to begin the next to advantage. It must happen some years that this balance is larger than in others, since there may chance to have been more than sufficient for the past year's expenditure, and yet not enough to afford another volume. This occurred last year, and we have consequently an unusually large sum now on hand. Your correspondent need not be afraid that we shall attempt to hoard it.

As regards the election of officers and the place of holding the meetings of Council, if any plan could be adopted which would secure a more general co-operation of our members than does the present one, all who wish the Society well would rejoice at it. Its laws were framed with the especial object of securing this co-operation to the greatest possible extent, and I think that we have fully acted up to their spirit in repeatedly asking the opinions of the members generally in respect to matters under the Council's consideration. The place of holding the annual meeting was fixed by one of our laws for that at which the meeting of the British Medical Association takes place, and solely with the hope of securing a good attendance, and an attendance not only of London, but also of provincial residents. Sometimes we have had large and influential annual meetings, and sometimes we have had very small ones. From what I have known of similar meetings in London, I feel sure, however, that we should have a much worse attendance here; whereas such a plan would, of course, leave the business of the annual meetings (as that of the Council practically must be) in the hands of London residents only. It is quite true that in this, as in all other Societies, the outgoing Council prepares the list of names to be proposed for the next year. Who else is to do it? In proof, however, that the annual meeting does exercise some influence, I may mention the fact that more than once alterations in the Council's list have been made by it. I am sure that I may appeal to the list of present members of Council for proof that all classes of the profession are represented in it, and that great care has been taken to secure those who are well acquainted with current medical literature, and especially with that of the Continent.

Your correspondent thinks that the offices of the Society should change hands frequently. Our laws provide for the change of Council and Vice-Presidents. During the seven years the office of President has been held by three different gentlemen; that of Treasurer by two; and that of Secretary, although still in my hands, has been so changed in character that its more onerous duties and the whole of the salary now devolve upon our business agent. The duties which now attach to my post are, I believe, not more than the Secretaries to our different Medical Societies discharge without salary, and I have therefore felt no scruple in again asking the Society to place me during the short time further that it may be thought advisable for me to retain office on a similar footing. To this request, after making a liberal provision for the payment of my amanuensis and for incidental expenditure, the Council has acceded.

Thanking your correspondent for the courteous tone of his letter, and trusting that I have explained to his satisfaction the reason why we have incurred the blame of getting rich, I have the pleasure to subscribe myself,

THE HON. SECRETARY TO THE NEW SYDENHAM SOCIETY.

Finsbury-circus, Feb. 20th, 1866.

George of Kensington must mean John of Gaddesden, who flourished in 1315, and whose works in manuscript are in the library of the College of Surgeons. John Ardern was surgeon with Edward III. at the battle of Cressy.

THE letter of *Dr. James Newton Heale* (Winchester) arrived too late for insertion in the present number.

An Assistant, (Ware, Herts.)—1. The examination would, no doubt, be of a more practical character than the usual one.—2. Yes, by courtesy.

THE GRIFFIN TESTIMONIAL FUND.

To the Editor of THE LANCET.

SIR,—The following subscription has been further received on behalf of the above Fund:—

Christopher Tayler, Esq., Trowbridge	£0	5	0
Amount previously announced	134	0	3
Received at THE LANCET Office	10	19	0

Yours obediently,

ROBERT FOWLER, M.D.,
Treasurer and Hon. Sec.

145, Bishopsgate-street Without, Feb. 28th, 1866.

A Subscriber.—There is no fee claimable unless the case be carried into another court. If it be, then the witness will receive 10s. 6d. for his attendance, application for which should be made to the clerk of the sessions.

H. M., (Liverpool.)—The proceedings between Dr. Schomberg and the College of Physicians commenced in 1746, and were continued till 1753.

THE last number of THE LANCET contained a notice of a "new chalybeate spring at *Cheltenham*." It should have been *Harrogate*.

An Inquirer.—We believe that Servia and Hungary supply the Germans very largely with pork and its various preparations; but that lately the trade has been very much lessened in consequence of the diminished consumption from fear of trichinæ.

F.R.S., (Belgravia.)—Sir Hans Sloane, Bart., succeeded Sir Isaac Newton as President of the Royal Society.

IF *A Militia Surgeon* will refer to the correspondents' pages of THE LANCET for two or three weeks after the appearance of the letter of "M.D.," he will find information which may aid him in the attainment of his object.

The Honorary Secretary of the Harveian Society.—The discussion is too long for insertion. A brief abstract of the proceedings of the Society would be inserted.

J. M.—The official list will be published shortly.

A. A. E.—We know of no better English works for the purpose than Huxley's "Elements" (Churchill) and Owen's "Anatomy of Vertebrates" (Longmans). There is no good manual on the Annulosa.

R. S.—About a year and a half or two years' purchase.

G. P. R., M.D.—The celebrated John Brown was elected President of the Medical Society of Edinburgh in 1776, and he afterwards instituted a Lodge of Freemasons, called the Roman Eagle.

Paris.—The gentleman named is highly respectable, and has made the disease his special study.

THE letter of *Dr. John Lowe* shall appear in our next number.

POOR-LAW MEDICAL REFORM.

To the Editor of THE LANCET.

SIR,—I shall feel obliged by your finding space for the names of the following gentlemen, who have forwarded subscriptions to the Association during the past week. I am, &c.,

12, Royal-terrace, Weymouth, Feb. 24th, 1866. RICHARD GRIFFIN

Subscriptions received by Mr. Griffin:—H. P. Oliver, Taunton, 4s.; W. M. D. Cooper, Thingoe, 10s.; K. J., 4s.; J. Westell, Cookham, 20s.; R. J., 11s.; G. Morris, Hereford, 5s.; R. Thomason, Hereford, 5s.; G. Hanbury, Hereford, 5s.; J. C. Lane, Hereford, 5s.; F. H Sankey, Bridge, 10s.; G. B. Norman, Basford, 10s.; R. Simpson, Settle, 5s.; T. Dobson, Windermere, 5s.; W. Holme, Kendal, 5s.; Hope, 5s.; Wm. Norman, St. Columb Major, 5s.; R. R. Allen, Belper, 10s.; F. Eldridge, Andover, 20s.; E. Hegginbotham, Wincanton, 10s.; J. W. Combs, Ticehurst, 5s.; J. Wills, Starminster, 10s.; J. Smart, Bethnal-green, 10s.; W. Jones, Wigton, 5s.; M. Mason, Sudbury, 10s.; J. A. Ledgard, Carlton, 5s.; R. Ransom (not union), Cambridge, 10s. 6d.; J. Dowse, Huddersfield, 5s.; C. Taylor, Melksham, 5s.; C. H. Parsons, Foleshill, 5s.; T. Hewlett, Hendon, 21s.

Subscriptions received by Mr. Prowse:—Thompson and Felce, Launceston, 21s.; J. T. Marshall, York, 10s.; W. Williams and Son, Guilsborough, 10s. 6d.; C. T. Mann, Boxford, 5s.; T. Jones, Ross, 10s.; W. S. Rootes, Ross, 10s.; A. H. Dowson, Orford, 5s.; G. H. Furber, Maidstone, 5s.; R. L. Smith, Clare, Suffolk, 5s.; T. Williams, Pontypool, 10s. 6d.; R. Hughes, Bala, 10s. 6d.; C. C. Cogan, Greenwich, 5s.; A. S. Kingdon, Combmartin, 5s.; J. Yeoman, Whitby, 10s.; A. B. Vise, Holtbeach, 10s.; C. Dandy, Ormskirk, 20s.; G. R. Bartt, Chard, 10s.; J. H. Somerville, Walsall, 10s.; G. S. Robinson, Saffron Walden, 10s.; W. Williams, Festiniog, 10s. 6d.; R. Roberts, Festiniog, 10s. 6d.; T. S. Douglas, Cockermouth, 10s.; W. Sutherland, Bellingham, 5s.; J. S. Barrett, Abingdon, 10s.; J. W. Moorhouse, Ellesmere, 10s. 6d.; S. H. Franklyn, Lexden and Winstree, 5s.; E. Jones, Merthyr Tydfil, 10s. 6d.; G. R. Cooke, Dartford, 5s.; J. J. Terry, Tenterden, 5s.; J. G. Terry, Tenterden, 5s.; W. Hitchin, Bath, 10s.; S. Molyneux, Wigan, 10s. 6d.; J. Renton, Hexham, 10s.; W. Dixon, Doncaster, 10s. 6d.; H. Grace, Bristol, 10s.; H. M. Grace, Clifton, 20s.; C. M. Thompson, Godstone, 10s. 6d.; M. J. Egarr, Wisbeach, 5s.; H. Harland, M.D., Uckfield, 21s.; E. F. Whitaker, Witney, 5s.; J. Heaslegrave, Huddersfield, 5s.; S. Drew, Wortley, 7s. 6d.; E. P. Hemingway, Eton, &c., 21s.; R. Slater, Ashton-under-Lyne, 5s.; F. Workman, Reading, 10s.; H. Bishop, Tonbridge, 21s.; G. H. Macnamara, Eton, 20s.; W. Lattey, Southam, 5s.; R. Lamb, Islington St. Mary, 5s.; E. Marshall, Croydon, 21s.; J. C. Reid, Morpeth, 5s.; W. Arras, Carlisle, 10s.; R. Smith, Epsom, 5s.; J. S., 5s.; T. Holyoake, Selsdon, 10s.; L. K. Yelf, Shipston-on-Stour, 10s.; T. S., 5s.; J. Tiley, Hitchin, 5s.

Mr. Griffin has forwarded to those members of the Association who have subscribed during the last twelve months a pamphlet of 52 pages and the following letter:—

12, Royal-terrace, Weymouth, March 1st, 1866.

DEAR SIRS,—The accompanying pamphlet is intended to be sent to each member of Parliament so soon as we can get some gentlemen to undertake the introduction of a Bill into the House of Commons. It is possible the proposed Bill may not meet with the entire approval of all; but it must be borne in mind that it is almost impossible to meet the views of everyone, and much will depend upon the member who introduces the Bill as to the exact clauses that shall be retained.

I intend to apply to one or two members about bringing in the Bill; but as it is possible they may not accede to my request, I hope each of you will consider that it devolves upon you individually to find a member. By adopting this course we shall be sure of success. Should any of you require a pamphlet to send to a member to whom you may write, I will supply you with it. I regret I can only send pamphlets to the medical officers who have subscribed within the last twelve months, as the present subscriptions will only about cover recent expenses. I therefore trust that if any of your colleagues intend to subscribe, they will do so without loss of time, in order that the printer may strike off the requisite number of copies, as the type of so large a pamphlet cannot be reset without great expense. It may possibly be said that much of the present pamphlet is merely a transcript of former ones, which I admit; indeed I only view it as a rearrangement, with some additions, of much that has been written before; but had I not adopted this course, a majority of the present House of Commons would know nothing of the matter, and would take it for granted that the late Select Committee on Poor Relief (England) had fully gone into the subject, and from the evidence laid before them had decided that there was no need of fresh legislation, whereas now they will see that the subject was not fully gone into by the Select Committee, and that the evidence of a Poor-law Inspector had grossly misled them. I am, dear Sirs, sincerely yours,

To the Subscribing Poor-law Medical Officers of the last twelve months. RICHARD GRIFFIN.

A Sufferer.—We know nothing at all about the agent, but suppose it to be some nostrum or quack's deceit. Our correspondent should consult a medical practitioner in time, or he may rue the consequences of not doing so.

L.A.C., (Potteries.)—The proceedings of the guardians of the Stoke-upon-Trent Union have not escaped our notice. They shall be referred to next week.

Mr. W. D. Spanton (Stoke-upon-Trent) is thanked. Yes, we shall be happy to insert the communication mentioned.

OUR talented correspondent from Portsmouth has forgotten to forward his name.

M. B. (Bracknell) should send the particulars.

Student.—The eleven "recognised hospitals" of London.

THE REPORT OF THE ARMY AND NAVY COMMITTEE.

To the Editor of THE LANCET.

SIR,—It appears to me that, "in order to guard the interests of her Majesty's service," the recommendations of the Army and Navy Medical Committee have made the retirement scheme a dead letter in asking staff surgeons to sacrifice 4*s.* 6*d.* a day if they wish to retire after twenty years' service, and 5*s.* after twenty-five years, unless "they are found on medical survey to be permanently unfit for further service."

What is the career of a naval medical officer? He is called upon to serve readily and willingly in every part of the world; and if epidemics break out in our colonies, even amongst the civil population, as in Jamaica some years since, he must be prepared to go there—in fact, he must go wherever he is ordered. After having completed twenty years of full-pay service, and during that time being separated from his family, he hopes to be allowed to retire on his half pay at least, to be no longer a stranger to his children, and to make way for younger men; for it is only to a few that there is any prospect of promotion to inspectoral rank. By these "recommendations" he can only look forward to an extended period of service without adequate increase of pay.

This may be easily shown. Take a staff surgeon who attains that rank by "perpetual grind" at the age of forty-one or forty-two years. He finds himself in the receipt of 24*s.* per day, and after completing twenty-two years' service in the receipt of 27*s.* Although the Committee have secured the services of these officers until they attain the age of fifty-five, they have been careful to give no advance of pay; so that from the age of forty-four or forty-five they would have to serve eleven and ten years respectively without any advance on the 27*s.*

Amongst some executives the idea exists that medical officers have only to go on shore, put a brass-plate on their door, and make a fortune on retiring from the service after twenty years; but you, Sir, must be well aware that twenty years' sea service is the worst possible training for private practice.

The raising of the pay of assistant-surgeons on entry to 12*s.* 6*d.* is an enticing bait; but they must notice that they must serve ten years before there is any increase. Those young officers who entered when assistant-surgeons' pay was last increased are those who now feel most the inadequacy of the surgeon's prospects, and will now see how little they have to look forward to by the promotion or retirement of the staff surgeons.

I think it right to bring these circumstances under the notice of young men who may think of entering the navy, lest they find themselves, like

Your obedient servant,

February 24th, 1866. DISAPPOINTED.

P.S.—The relative rank is forgotten in the assignment of the Greenwich Hospital pensions, where commanders receive £65, and staff surgeons £50.

To the Editor of THE LANCET.

SIR,—I have perused the Report of the Army and Navy Medical Services Committee. It is easy enough to place one's finger on the blot in that document. There is still no chance of promotion for assistant-surgeons within reasonable limits. This has always been represented to me as one of the main sources of discontent. A candidate will inevitably quit the army medical service in the very same rank he entered it. His maximum daily pay will be 17*s.* 6*d.*; for no provision for an increase is made beyond fifteen years, and he may, if he thinks fit, retire after twenty years' full-pay service on half that sum—viz., 8*s.* 9*d.*

The navy does not appear to labour under this disadvantage, promotion to the rank of surgeon being much quicker in that service. The addition of a shilling or two to the daily pay is but a poor substitute for a life-long position in the lowest rank.

I cannot believe that these things are calculated "to encourage the coming forward of a larger number of the most eligible class of candidates" for her Majesty's army medical service.

I am, Sir, yours obediently,

London, Feb. 27th, 1866. AN HOSPITAL SURGEON.

To the Editor of THE LANCET.

SIR,—That a great boon is withheld from us by the recommendations of the Army and Navy Committee, I think will scarcely be denied. The retirement at twenty years was imperatively called for at a moderate rate, and even then few men would have been able to resign, leaving few vacancies. What on earth is the use of offering 12*s.* per day after twenty years? Why not say, we will not give you your early retirement!

It is very well to say that no second place at the mess-table should be recognised, when this point has been at last ceded. Every medical officer knows that, on account of this, surgeons and surgeons-major have hitherto been treated as nonentities, and insulted over and over again.

Trusting that you will bring these matters forward, and insist, as does Sir Jas. Gibson, on our having exactly the same pay as the navy,

I remain, Sir, yours, &c.,

February, 1866. AN ARMY SURGEON.

P.S.—Wherever the name appears in the Army List, the relative rank should appear with it.

*** It is calculated that promotion will occur at a fairly early period. Sir James Gibson's protest is ill-conceived, and has no good foundation. The complaints of our correspondents do not seem to us much better founded, and we think that the army medical officers, if they receive the great boon which these recommendations profess, should for the present feel well satisfied, and cease to express discontent.

THE BEGGING IMPOSTOR.

WE have received letters from *Mr. Curgenven* and *Mr. Weller* (Fulham), who have been defrauded by the impostor mentioned in a letter in our last week's impression.

Mr. Henry Lee shall receive a private note.

H. M. is quite correct. The Royal Medical and Chirurgical Society occupied a large house on the western side of Lincoln's-inn-fields before removing to Berners-street.

Mr. Davis.—Professor Hancock will deliver in the course of the summer six lectures on the "Anatomy and Surgery of the Foot" at the College of Surgeons.

Dr. W. B. Muskett.—The notice referred to the lines on homœopathic soup.

Glasgow Herald.—Next week.

Lichen.—Mucilaginous matter associated with a bitter principle.

DUTIES OF UNION MEDICAL OFFICERS.

To the Editor of THE LANCET.

SIR,—In your remarks upon the case of Mr. Hume (THE LANCET, Feb. 10th), you say "The sooner all the duties and risks of Poor-law medical officers are understood the better."

Considerable misconception exists with regard to these duties in the mind of the general public, and even amongst medical men. As the guardians in the case in question are called the Board of Trustees, possibly there may be some contract of a special character between them and the medical officer, requiring him to attend persons without an order; but if so, this is an exceptional case. The duties of a medical officer are definitely and distinctly laid down by the Poor-law Act, and I conceive that the Boards of Guardians are merely the executives for carrying out the provisions of the Acts of Parliament, subject to the supervision of the Commissioners of the Poor-law Board. Art. 200 says: "The medical officer shall duly and punctually attend whenever he may be lawfully required to do so by a written or printed order of the guardians or of a relieving officer of the union or an overseer." And the 8 Off. Circ. 90, 9 Off. Circ. 47, state "that this term 'lawfully' now introduced certainly requires the medical officer to ascertain whether the requisition be lawful or not. Therefore if he receive any order in a case where he cannot be lawfully required to attend, he may act upon it or not at his discretion." Again: "The medical officer is not bound to attend upon a sick pauper without an order in writing or print, calling upon him to do so." (8 Off. Circ. 85.) The Commissioners also state: "If a medical officer do attend without an order, and treat the party as under his care, the Poor-law Board would treat any neglect of the patient on his part as equally culpable as if he had received an order."

Looking at these directions and orders, I have always acted upon the principle of refusing to acknowledge any person as a pauper patient, unless I receive a written or printed order requiring my attendance. In fact, I look upon my engagement with the Board of Guardians in the light of a contract, in which my duty is to attend to those persons who are directed to apply to me in the lawful manner; and I should certainly not allow my conduct towards any patient to be called in question by the guardians who had received no order for my attendance, and whom I had consequently not placed upon my medical relief-book. If medical officers were to act upon this principle, I believe it would be better for all parties. If the Islington Board paid any extras, I question whether they would be disposed to acknowledge all the patients who applied to Mr. Hume as pauper patients. A Board of Guardians would consider a man's wife poor and a fit case for the doctor if she were ill with toothache or bronchitis; but that same woman would be refused an order for attendance in her confinement or for a fractured limb if an extra fee had to be paid, and she would be told to go into the house or an hospital to be attended to.

I am, Sir, yours, &c.,

February, 1866. A MEDICAL OFFICER.

WE have received 10s. 6d. from Mr. R. Hughes (Bala) towards the Griffin Testimonial Fund, per Mr. Prowse.

A. B. C.—The lines on Sir Wm. Fergusson are highly laudatory, but not suited for our pages.

A. F.....g.—1. Lactic acid in rheumatism; uric acid in gout.—2. Dr. Garrod's treatise.—3. The work of Dr. Fuller.

Beta.—The list will be published in due course.

A Practitioner.—St. Andrews.

M. P.—They cannot properly be regarded as paupers; but the assistant-overseer is legally entitled to give the order. This is, however, an anomaly in the state of the law.

A. B. will find an article on the subject in another part of this week's impression.

Mr. Dyer.—No charge is made for such announcements.

MEDICAL NECESSARIES.

AT a late meeting of the guardians of the Tiverton Union, Mr. Gulson, the Commissioner of this district, remarked as follows:—

"There could be no doubt that when a medical man sent to the relieving officer to provide certain necessaries, he exceeded his authority. The medical man had nothing whatever to do with the relief. He could recommend to the Board that certain necessaries were requisite, and when that was done it was for the Board to consider what amount of relief should be granted to the pauper. If, upon inquiry, they were satisfied that they were granting sufficient for the maintenance of the wife and family, and the medical man still persisted in his orders for a larger quantity of extras, it was within the province of the guardians to order him into the workhouse, and to lessen the pay in accordance with the extras he received. For instance, if a man was receiving 5s. per week, and was then ordered half a dozen pounds of meat per week, he could not want so much in money. (Hear, hear.) The settlement of the matter was entirely at the discretion of the guardians."

EVERY communication, whether intended for publication or otherwise, must be authenticated by the name and address of the writer. Papers not accepted cannot be returned. Articles in newspapers, to which attention is sought to be directed, should be marked. Communications not noticed in the current number of THE LANCET will receive attention the following week.

COMMUNICATIONS, LETTERS, &c., have been received from — Dr. Cobbold; Mr. H. Lee; Dr. Heale; Mr. Curgenven; Mr. Bailey, Coleshill; Mr. Ward; Mr. Braah; Dr. Ransome; Mr. Moir; Mr. Witherby; Mr. Payne, Sheffield; Mr. Evershed; Mr. Gilbert; Mr. Savage, Swinefleet; Mr. Spanton; Dr. J. D. Jones; Mr. Whitford; Dr. Hoyle; Dr. Murray; Dr. Belgrave; Dr. Fotherby; Mr. Peel; Dr. Crisp; Mr. Park; Mr. Thomas, St. Clears; Dr. Bodleman; Mr. Belton; Mr. Norman; Mr. Greening, Manchester; Dr. Johnson; Mr. Prowse, Amersham; Mr. Noakes; Mr. Staples; Mr. Rhind; Dr. Hewson; Mr. Parsons; Mr. Bennie, Lympstone; Mr. Browne; Dr. Dyce, Edinburgh; Mr. Burnham; Mr. Salt; Dr. Dickson, Parsonstown; Mr. Locking, Hull; Mr. Weller; Dr. Turnbull; Mr. Griffiths; Dr. Fowler; Dr. Fernie, Edinburgh; Dr. Collins; Dr. Bond, Southampton; Mr. Warriner; Dr. Dodgson, Cockermouth; Mr. R. O. Clark; Dr. Herbert; Mr. Sheppard; Mr. Palmer, St. John's; Mr. Watkins; Mr. Bloxam, Llandovery; Mr. Garden, Loodiana; Mr. Nunneley, Leeds; Dr. Buckley, Castle Townsend; Mr. Hembrough; Mr. Griffin; Mr. Cowderoy; Beta; Fire Ball; A. A. R.; ——, Portsmouth; "Never Mind;" A Militia Surgeon; An Inquirer; B. H.; Omicron; C. R.; The Director-General of the Army Medical Department; C. H.; Ignoramus; Ignotus; Fides; P. W.; Erithacus; W. B. M.; M. S.; A Practitioner; Box; The Secretary of the Beaumont Medical Society; L. R.; An Aspirant; M.D.; R. S.; L.R.C.P. Lond.; A Subscriber; Undergraduate; An Army Surgeon; L.S.A.; J. B. F.; Disappointed; &c. &c.

THE *Chester Courant*, the *Glasgow Herald*, and the *Dudley Guardian* have been received.

Medical Diary of the Week.

Monday, March 5.

ST. MARK'S HOSPITAL FOR FISTULA AND OTHER DISEASES OF THE RECTUM.—Operations, 9 A.M. and 1½ P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—2 P.M. General Monthly Meeting.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. Huxley, "On the Classification and Structure of the Mammalia."
MEDICAL SOCIETY OF LONDON.—7 P.M. General Meeting for Election of Officers and Council.—8½ P.M. Clinical Discussion.—Dr. Macpherson, "On a Case of Threatened Elephantiasis of the Scrotum in a European."
EPIDEMIOLOGICAL SOCIETY.—8 P.M. Dr. Thudichum, "On Epidemic Outbreaks of Trichiniasis (Spiral Flesh-worm Disease)."
ODONTOLOGICAL SOCIETY OF GREAT BRITAIN.—8 P.M.

Tuesday, March 6.

GUY'S HOSPITAL.—Operations, 1½ P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Professor Frankland, "On the Non-Metallic Elements."
ANTHROPOLOGICAL SOCIETY OF LONDON.—8 P.M. Mr. A. Higgins, "On the Orthographic Delineation of the Skull."—Mr. H. Wesley, "On the Iconography of the Skull."—Dr. Paul Broca, "On a New Goniometer for the Measurement of the Facial Triangle."—Mr. C. Carter Blake, "On certain Supposed Simious Skulls, Ancient and Modern, with reference to a Skull from Louth in Ireland."
PATHOLOGICAL SOCIETY OF LONDON.—8 P.M.

Wednesday, March 7.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
LONDON HOSPITAL.—Operations, 2 P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. Huxley, "On the Classification and Structure of the Mammalia."
HUNTERIAN SOCIETY.—7½ P.M. Council.—8 P.M. An open Meeting.
OBSTETRICAL SOCIETY OF LONDON.—8 P.M. Dr. Routh, "On a Case of Fibro-Cystic Disease of the Uterus."—Mr. Baker Brown, "On the Use of the Actual Cautery in Ovariotomy;" and other papers.

Thursday, March 8.

CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 1 P.M.
ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
LONDON SURGICAL HOME.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Professor Frankland, "On the Non-Metallic Elements."
MEDICAL SOCIETY OF LONDON.—Anniversary at St. James's Hall.—Oration, 5 P.M.—Dinner, 6½ P.M.

Friday, March 9.

WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. Huxley, "On the Classification and Structure of the Mammalia."
ROYAL INSTITUTION.—8 P.M. Sir John Lubbock, Bart., "On Transformation of Insects."

Saturday, March 10.

ST. THOMAS'S HOSPITAL.—Operations, 9½ A.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 1½ P.M.
ROYAL FREE HOSPITAL.—Operations, 1½ P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Rev. G. Henslow, "On Systematic and Structural Botany."